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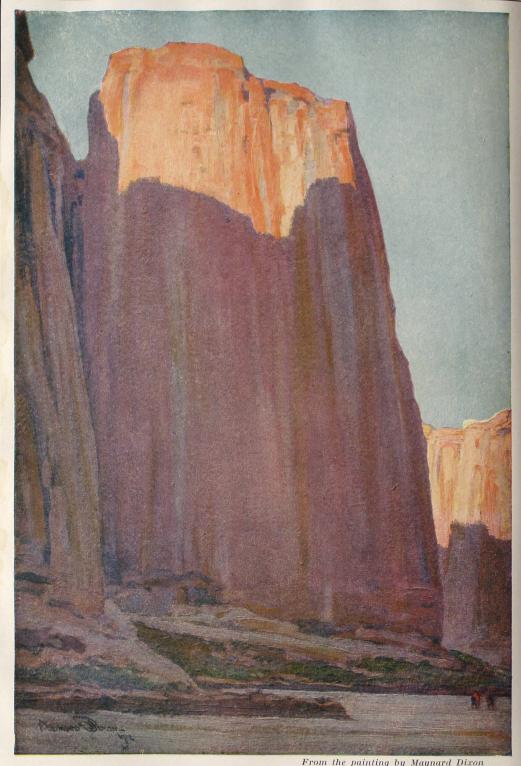
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From the painting by Maynard Dixon SPIRIT CANYON, NEW MEXICO

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The Ninth Annual Convention of Telephone Pioneers, Held This Year at Cleveland, Breaks Attendance Record

The ninth annual meeting of the Telephone Pioneers of America, held in Cleveland, Ohio, September 29 and 30, drew the largest attendance in the his-

tory of the organization.

The official welcome of the city was voiced by Mayor Fred Kohler, before a great audience assembled in the new Cleveland public hall to hear about "The Wonders of the Science of Communication," an interesting and impressive demonstration conducted under the direction of General John J. Carty, vice president of the American Telephone and Telegraph Company and the retiring president of the Telephone Pioneers of America, and F. A. Stevenson, director of the long-lines department.

The number of Pioneers and their guests officially registered for the convention reached twelve hundred and eighty, exceeding any registration at

previous conventions.

The first session of the convention was held on the morning of the 29th, with

General Carty presiding and delegates only in attendance. This was the first annual gathering under the new plan of representation by chapter delegates.

Officers were elected at this session, and L. H. Kinnard, president of the Bell Telephone Company of Pennsylvania, was chosen president of the Pioneers. Other officers elected were: Senior vice president, F. A. Stevenson, director longlines department; vice presidents—James T. Moran, president Southern New England Telephone and Telegraph Company; J. A. Steward, vice president New York Telephone Company; and E. A. Reed, president the Ohio Bell Telephone Company.

An executive committee was named, consisting of B. A. Kaiser of the American Telephone and Telegraph Company and J. E. Warren of the Southern Bell Telephone Company, for a term of one year, and Vernon Ray of the Illinois Bell Telephone Company, Miss Mary Miller of the Bell Telephone Company of Pennsyl-



"ON YOUR MARK, GET SET, GO!"

The Kiddie Kar Race at the Pioneer outing, Cleveland Yacht Club, September 30. Left to right: L. B. McFarlane, president Bell Telephone Company of Canada; Judge Franz C. Kuhn, president Michigan State Telephone Company; W. S. Gifford, vice president A. T. & T. Company; W. R. Abbott, president Illinois Bell Telephone Company; and E. A. Reed, president Ohio Bell Telephone Company. Mr. Gifford was winner.







PRESIDENT OF TELEPHONE PIONEERS
L. H. Kinnard, president of the Bell Telephone
Company of Pennsylvania, who was elected president of the Telephone Pioneers for 1923.

vania, and E. K. Hall, vice president of the American Telephone and Telegraph Company, for the term of two years.

The roll call of officers and delegates showed that every chapter was represented by its delegates, and that the total membership of the general assembly is sixty-eight.

The report of Secretary R. H. Starrett showed that on January 1, 1921, the membership of the Pioneers Association was 1700. On January 1, 1922, the membership had increased to 2363. During the present year 1902 new members were admitted and 28 were reinstated; 17 died or resigned, leaving a net membership at the present time of 4276, a net gain of 1913 for the year.

Secretary Starrett reported that since the last annual meeting the following chapters have been organized: 1. Theodore N. Vail; 2. N. C. Kingsbury; 3. Kilgour; 4. Wisconsin; 5. Empire; 6. Liberty Bell; 7. Central Pennsylvania; 8. Rocky Mountain; 9. Morris F. Tyler; 10. Wolve-

rine; 11. George F. Durant; 12. H. G. Mc-Cully; 13. Western Pennsylvania; 14. Thomas Sherwin, New England Territory; 15. Alexander Graham Bell, Chesapeake and Potomac; 16. Hoosier State, Indiana Territory; 17. Hawkeye, Northwestern Bell; 18. C. P. Wainman, Northwestern Territory; 19. Casper T. Yost, Northwestern Territory.

While the delegates were in session other Pioneers and their guests were taken about the city. More than two hundred guests visited the plant of the White Motor Company, where they were entertained most hospitably by the officials of that organization.

At the afternoon session of the 29th, General Carty read to the delegates a letter and a telegram from the widow of Alexander Graham Bell. These communications commanded the profound respect of the convention. The letter read in part as follows:

BEINN-BHREAGH, NEAR BADDOCK, N. S.

DEAR MR. CARTY: I am beginning to get distressed over the many statements the papers have been publishing of Mr. Bell's dislike of the telephone. Of course, he never had one in his study. That was where he went when he wanted to be alone with his thoughts and his work.

There are few private houses more completely equipped with telephones than ours at 1331 Connecticut Avenue, and there was nothing that Mr. Bell was more particular about than our telephone service here. For nearly all of the thirtyfive years we have been here he saw personally to its proper working. It was owing to this telephone system that we were able to come and stay up here this summer. Our physician lives sixty miles away in Sydney. I myself called him up at half-past five a. m. that last day; he answered immediately and all through that day the telephone served Mr. Bell faithfully and well, bringing to him first one then another for whom he called. Afterwards the telegrams from all over came pouring in day and night, telephoned over without delay or mistake.

Mr. Bell did like to say in fun, "Why did I ever invent the telephone?" but no one had a higher appreciation of its indispensableness or used it more freely when need was—either personally or by deputy. And he was really tremendously proud of it and all it was accomplishing. He appreciated the honor of being the first to talk from New York to San Francisco, was awed by the wonder of its performance at that dinner at the New Willard, followed with interest its usefulness during the war and the development shown at Arlington last autumn.

I shall always be so thankful that the telephone worked so well that last day—serving its father so loyally. Yours very sincerely,

(Signed) MABEL G. BELL.

August 24, 1922.





In a telegram to General Carty Mrs. Bell said:

To few inventors indeed has so much consideration been shown through so many years by a corporation which owed its beginning to his discovery.

When we were married, Mr. Bell gave me all his interest in the American Telephone development except one share which he kept to the end that his name might continue on the books of the telephone company, and he delighted in this bit of sentimentality.

Will you as president please tell the Pioneers of all this? Also remind them that he attended the first meeting of their society in Boston in 1911, making the long journey down from here for the purpose. I well remember the pleasure which his wonderful welcome gave him, and his regret that neither I nor any of his children were with him to witness it.

Our children and I wish also to thank the Pioneers for their kind message of sympathy and flowers sent August 4. Perhaps also we may speak of our appreciation of the beautiful tribute paid Mr. Bell's memory in that moment's hush at sunset. It would have touched him deeply.

MABEL G. BELL.

General Carty in his address to the convention paid a touching tribute to Doctor Bell and read Doctor Bell's address at the first meeting of Pioneers eleven years ago in Boston, when the inventor of the telephone said:

I feel it a little presumptuous on my part to try to speak of the telephone to telephone men. You have all gone so far beyond me. Why, the little telephone system that I look back upon, what is it compared to the mighty system that goes through the whole extent of our country today? It is to you that this great telephone development is due, and I feel that it behooves me to speak very modestly of the little beginning that led to this great end.

Of the future General Carty said:

The grand purpose of our society, the greatest work which it can do, is to exemplify the ideals of our service and to transmit to its future mem-

bers the glorious traditions of our art. It should be our high resolve to encourage and to sustain among the men and women of the telephone system their ever-increasing zeal for the public service.

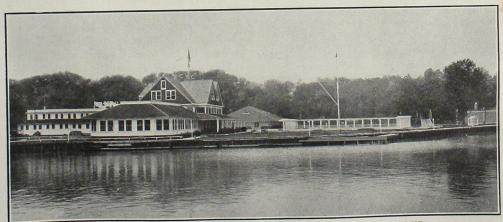
In closing General Carty declared:

It is the great mission of the Pioneers and their successors and their associates among all the nations to build up a telephone system extending to every part of the world, connecting together all the peoples of the earth. I believe that the art which was founded by Alexander Graham Bell, our first Pioneer, will provide the means for transmitting throughout the earth a great voice proclaiming the dawn of a new era in which will be realized that grandest of all our earthly aspirations—the brotherhood of man.

On the evening of the 29th, Pioneers and their guests went to the big public hall for the demonstration. Fourteen thousand persons assembled to hear the transcontinental roll call and incidental entertainment under the direction of General Carty and F. A. Stevenson, director of the long-lines department of the American Telephone and Telegraph Company.

E. A. Reed, president of the Ohio Bell Telephone Company, as chairman of the general convention committee, opened the public hall meeting with a short talk, aided by the Bell Loud Speaker. After a selection by the Ohio Bell male chorus, Mr. Reed introduced Mayor Kohler, who welcomed the visitors.

General Carty was introduced as the chairman of the meeting. He then presented Newton D. Baker, former Secretary of War and president of the Cleveland Chamber of Commerce. Mr. Baker in a brilliant address, which was enthusiastically received by the audience, praised General Carty for his services in



BELL SYSTEM PIONEERS VISITED THE CLEVELAND YACHT CLUB







THE TOKEN OF VICTORY

President H. B. Thayer presents W. S. Gifford with the first prize for winning the Kiddie Kar Race at the Pioneer convention outing, Cleveland

Yacht Club, September 30.

France during the war and made some impressive remarks about the future of

Mr. Baker said in part:

the telephone.

When we went into the World War we knew that one of the most important elements for the successful operation of great armies was communication. When our men were mobilized upon so vast a scale as they were in the late war, the difficulty of getting messages from one part of that widespread front to another may well be imagined. The enemy realized the importance to us of communication, and every place a telephone exchange or a telegraph office was established became at once a center of enemy activity. And when our enemy was controlling the air with airplanes, one of their primary objects was to destroy by bomb these outposts of intelligence.

We realized, of course, the necessity of establishing some sort of a signal system, but I think very few of us realized the even greater importance of establishing in France an independent telegraph and telephone system of our own.

When that need was realized, General Carty, vice president of the American Bell Telephone Company, in charge of development and research, instantly volunteered his services. He is the greatest expert in America on that subject. For some reason which I can not now recall, but for which I suppose I must hold myself responsible, he was made a brigadier general instead of a major general. He should have been a major general, not only because he was followed into the service by a full division, which is a major general's command, of the employees and agents of the American Bell Telephone Company, but because the services he performed were major services.

I am sure you recall that we went into the war in April of 1917 and that the war ended by the armistice on the eleventh day of November, 1918. During those very few months when we were busy shipping two million men and training another two million, and doing all of the very large—unprecedentedly large—physical and material things which were required to be

done for an effort of that magnitude, General Carty and his signal service men in France did almost unnoticed a thing which is quite without parallel in the history of science and material achievements. He built a telegraph and telephone system extending all over France, operating 282 separate and independent telephone exchanges, a very large number-perhaps 170 or 175 telegraph stations-and extending them even to England by cables under the English Channel so that the American army in France was not dependent upon the facilities which France was able to supply to us, but had its own facilities. Indeed, in that and many other regards our army in France was simply a portion and section of the great industrial and scientific life of America, transferred temporarily to foreign soil.

I am sorry for this reason only that there is no remnant left in me of the power that once was there as Secretary of War. If there were any such remnant of power left in me I should tonight promote General Carty from brigadier general to major general.

I have not that power, but you have it in your power to adopt him, as I long have adopted him in my affections, into your affections as a man who brought the very highest scientific attainments, elevated by the most energetic patriotism, into the service of the country.

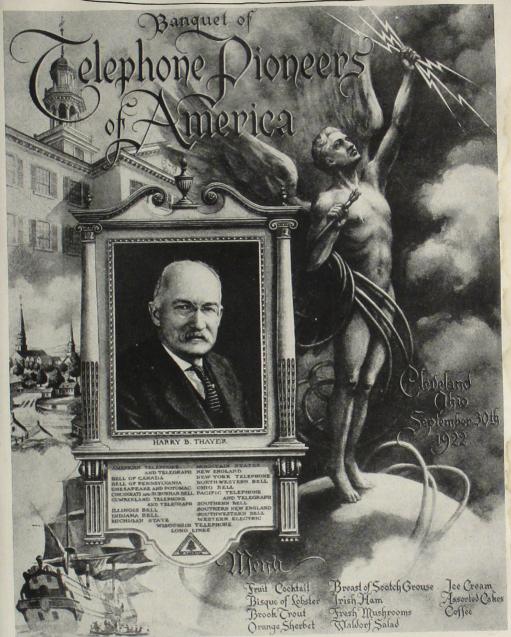
I pay two tributes tonight: one a personal tribute which I delight to pay to my associate, General Carty; and I pay the other tribute to Alexander Graham Bell, whose spirit is hovering over us this evening, and to those Pioneers who were associated with him in the development of this great instrument of civilization. close what I have to say by expressing the fervent hope in a prayer that these great agencies of science may really work out their final and beautiful result in drawing men so much closer together in this world that misunderstanding and injustice will be put to flight, and that with them to aid us we can face a future in which justice will prevail and in which peace, the daughter of justice, will be our common legacy and prosperity and a better lot for mankind the common heritage of the children of men.

General Carty then began the demonstration. He called the roll of stations on the transcontinental line, every answer being heard distinctly in all parts of the hall by means of the amplifying powers of the loud speaker.

Starting with Beaverdam, one by one the stations west of Cleveland answered —Chicago, Davenport, Omaha, North Platte, Denver, Rawlins, Salt Lake, Winnemucca, Sacramento, and San Francisco. Then after a few words with H. G. Bates of The Pacific Telephone and Telegraph Company at San Francisco, General Carty called in turn Pittsburgh, Harrisburg, New York, Philadelphia, Richmond, Salem, Denmark, Jacksonville, West Palm Beach, Key West, and Havana, and the string of small lights on a map of







PIONEERS' BANQUET MENU CARD

At the banquet given to the Telephone Pioneers of America, in Cleveland on September 30, each of the 1200 guests received a photo engraved menu card as a souvenir of the event. As $H.\ B.$ Thayer was present both as representing the American Telephone and Telegraph Company and as a past president of the Pioneers, the committee on arrangements thought it would be peculiarly fitting to design the souvenir to do him honor. In the center of a card about eighteen by twelve inches is an excellent portrait of Mr. Thayer surmounting a tablet bearing the names of the associated companies constituting the Bell System. The artist, Charles Sindelar, shows in the lower left-hand corner of the card, a picture of the Mayflower, which brought the founder of the Thayer family to America. Above is a sketch of the little Vermont town of Northfield where Mr. Thayer was born, and in the upper corner the belfry of Dartmouth College, his alma mater. On the right is a conventionalized drawing of a winged figure, standing tiptoe on the earth with thunderbolts, torch, and cable, suggestive of the statue, the Spirit of Electricity, which surmounts the Bell System headquarters building in New York City.





the United States which visualized the various stations on the 5800 miles of telephone line was complete from San Francisco to Havana.

As General Carty called Havana and the reply from the Cuban capital came back loud and distinct, there were cheers from the audience.

General Carty talked with C. A. Caldwell, chief engineer of the Cuban Telephone Company at Havana, then with Mr. Bates at San Francisco, asked each the time and inquired about the weather. Then Mr. Caldwell at Havana talked with Mr. Bates at San Francisco. The Bell Loud Speaker enabled the vast audience to hear every word of their conversation.

Miss Betty Bates, daughter of Mr. Bates, played a violin solo in San Francisco and the audience in Cleveland applauded heartily. Mr. Bates thanked the audience for the applause.

The transcontinental demonstration ended after General Carty said goodnight to all the stations and a bugle in San Francisco sounded taps.

The next day was play-day for the Pioneers. Starting from convention headquarters at the Hotel Cleveland at 10 o'clock in the morning, the party journeyed to the Cleveland Yacht Club for an outing.

On the Yacht Club Island, in the beautiful canyon of Rocky River, the Pioneers enjoyed themselves immensely. At noon they were guests of the Western Electric Company at luncheon, Charles G. Du-Bois, president of the Western Electric, and L. A. Davies, manager of the Western Electric Company's Cleveland telephone house, acting as hosts.

A banquet at Masonic Hall started at 7 o'clock Saturday evening, with thirteen hundred people seated at tables in groups of eight. A unique and attractive souvenir menu was received by each person at the banquet, on which was a picture of H. B. Thayer, president of the American Telephone and Telegraph Company, various scenes reminiscent of his career and a reproduction of the Spirit of Electricity which tops 195 Broadway, New York City. Pioneers were guests of the American Telephone and Telegraph Company at the banquet.

After the banquet all adjourned to the

auditorium to see the "Pioneer Revue," another convention surprise and success. It was an entertainment of varying features and was staged by Ohio Bell Telephone Company employees in a manner that would bring praise to a professional production.

The numerous committees named for the various activities of the convention made the affair a complete success, and the Pioneers left for their homes with expressions of appreciation of the hospitality of their Ohio hosts and of the pleasure and benefit found in membership in the association.

Conference With Mr. Hall

Following the meeting of the Telephone Pioneers of America in Cleveland, September 29 and 30, a number of the officials of the associated companies remained in the city for a brief conference on employee and public relations, over which E. K. Hall, vice president of the American Telephone and Telegraph Company, presided.

In addition to Mr. Hall, the meeting was attended by the following members of the personnel group and guests: W. E. Wickenden, assistant vice president of the American Telephone and Telegraph Company; W. A. Griffin, H. O. Leinard, M. T. Reuse, and W. K. Holland, assistants to the vice president, American Telephone and Telegraph Company; T. J. Feeney, assistant to the president, New England Telephone and Telegraph Company; T. P. Sylvan, vice president, New York Telephone Company; P. C. Staples, vice president the Bell Telephone Company of Pennsylvania; M. H. Buehler, vice president the Chesapeake and Potomac Telephone Company; J. E. Warren, assistant to the president, Southern Bell Telephone and Telegraph Company; W. D. Moore, general plant manager, Southern Bell Telephone and Telegraph Company; L. D. Sharp, secretary E. B. F. committee, Southern Bell Telephone and Telegraph Company; B. T. McBurney, vice president The Cincinnati and Suburban Telephone Company; F. L. Thomas, assistant to the president, Indiana Bell Telephone Company; H. W. Bang, assistant to the president, Illinois Bell Telephone Company; J. T. Sheafer, assistant to the president, Michigan State Tele-





phone Company; Franz Kuhn, president Michigan State Telephone Company; W. J. O'Connor, assistant to the president, Southwestern Bell Telephone Company; John O'Day, vice president Wisconsin Telephone Company; L. M. Holliday, assistant to the president, Northwestern Bell Telephone Company, and J. E. MacDonald, secretary and treasurer; John Kearns, superintendent of collections, The Pacific Telephone and Telegraph Company; D. H. Morris, assistant to the vice president; W. T. Teague, general superintendent of plant; R. Eide, general superintendent of traffic; W. G. Barry, general commercial superintendent; and N. Anderson, secretary E. B. F. committee, all of the Ohio Bell Telephone Company.

Why We Give Demonstrations

"The telephone is a modern invention," said Mrs. Eva Hawes, chief operator, San Diego, in a recent address before the Lions Club of that city. "Its wonderful progress has taken place in little more than a generation. Incredible as it may seem, forty years ago, when stage coaches were the most convenient mode of travel, steam engines few, aëroplanes and short skirts undreamed of, telephones were in their infancy. Because of this fact, because telephones are comparatively new and unknown to the average subscriber, we give demonstrations of the actual manipulation of a switchboard, hold visitors' days, and in other ways try to interest the subscriber so that he will have a better knowledge of the intricacy, vastness, and complexity of the telephone system, the difficulties encountered in giving service, and understand that the real value and efficiency of the service given depends largely upon the cooperation of subscriber and telephone employee.

"Telephone engineers have reduced to a minimum the chances for mechanical errors, yet there still remain many possibilities for making mistakes towards which the subscriber bears a very definite relation. Since the telephone employee is disciplined for discourtesy, carefully trained, and her work painstakingly supervised against bungling, prudence will direct her to meet the subscriber more than half way. Making mistakes is a very human failing, not at all limited

to the personnel of the telephone company. When the subscriber learns to accept the responsibility for good service on a fifty-fifty basis with the operator, the efficiency of the telephone will be increased many fold.

"Subscribers should realize that the character of the service depends to a certain extent upon their own feelings. Today, because business is good, a big deal is pending and the outlook is rosy, a slight delay or a wrong number received goes unnoticed, whereas tomorrow, when the big deal has fallen through, the same delay or mistake takes on an entirely different aspect. Also a mistake once made, no matter how avoidable it may have been, becomes past history and the futile reaction of 'cussing central' is misdirected energy which only adds to the friction.

"Courtesy is not anywhere an outstanding American characteristic, whereas telephone courtesy is almost in a class with the dodo bird. This is partly due to the general hurry and brusqueness of present-day life and partly due to the fact that the measure of every man's character is what he will do, knowing he will never be found out. Thus one subscriber on a party line makes life miserable for the others and then hangs up, believing his identity is a sealed secret.

"Telephone service is not faultless, and probably, due to the human element entering into it, never will be. Furthermore, the larger the system becomes the more opportunities there will be for errors to creep in and the more difficult will be the task of giving good, efficient service. However, a realization by both subscriber and telephone employee that efficiency means a coöperation of the two will greatly reduce the task."

British Telephone Growth

In a recent discussion of the government telephone service, the British Postmaster-General, Mr. Kellaway, stated that he expected by 1927 an increase in the number of telephones in Great Britain from 975,000 to 1,466,000. That is, he expected a growth in five years in Great Britain which is about the same as that realized every year in the United States by the Bell System alone.





Who's Who in a Telephone Company Operating Room

THE TRAFFIC CHIEF

To the casual observer it is rather a difficult question to solve as to just what particular function the suave, polished custodian of an operating room actually performs. He can usually be seen as a constant visitor of the chief operator, seemingly chatting cozily and comfortably about everything but business. He can be observed also as he paces to and fro along "Switchboard Row," a scowl on his massive brow, a nervous twitch to his fingers, and a slight fluttering of his sensitive nostrils as he sniffs the atmosphere. What does all this denote? Thought.

What is he thinking? If asked, he will probably disclaim any such dangerous tendencies, and in some cases he may be right. There are always exceptions. But for the most part the aforementioned physical manifestations actually do denote no small degree of brain exercise and concentration upon a problem. What is that problem? Service.

A present-day traffic chief can commit every sin of omission and commission in a telephone company's ten commandments, but if the offices under his control are giving the best possible grade of service, he is "papa's little sunshine and mama's joy." He can allow correspondence to pile knee-high unanswered in his "incoming basket" for months on end, but if he is giving service he can gargle his soup, yodel his macaroni, and "grand opera" his beefsteak, and no one will say he is not a nice boy. Service! What sins are committed in thy name!

What constitutes service—the satisfaction of the subscribing public with every phase of the handling of a telephone call. Each traffic chief is judged not only by the official rating given him as shown by the observing data, but also by the scarcity of subscribers' complaints in his district and the volume of business each central office under his control can handle satisfactorily. The maximum number of calls possible plus a well-nigh perfect service "makes" a traffic chief and a chief operator, and in turn redounds to the credit of the office as a whole.



IN HONOR OF THE LUSCIOUS MUSCAT GRAPE
This shows the people of our Escondido, Cal., office and the float entered in the parade on
Grape Day, September 9.







MANAGER REED OF ALHAMBRA ARRANGED THIS BOOTH

About fifty thousand people attended a carnival held recently under the auspices of the Alhambra

Business Men's Association, a live Southern California organization.

THE CHIEF OPERATOR

A chief operator is not as easily defined as is a traffic chief, because, in the first place, she is a woman, and that always complicates matters. In the second place, she can not be described as a class, because each and every one is separate and distinct in characteristics, whereas a traffic chief is a gregarious person and takes unto himself the attributes of the herd.

A chief operator holds the same enviable situation in an operating room as does the harassed mother of a family of three pairs of twins, two braces of triplets, and a couple of sets of quadruplets. In other words, she holds a "full house" against a royal flush—the cards are stacked before she starts. Just as it takes a genius in motherhood to raise that

family to be a credit to her, so it takes a genius of a chief operator to keep things running smoothly, maintain a sweet disposition, and keep the liking and respect of every one with whom she deals. The queer part of it is that so few fail against such odds, because it is always difficult for a woman to give orders to a woman and not get "mussed up" in the process.

A chief operator is the "go-between" in the line of organization in an exchange. She takes her orders from the traffic chief, and passes them along to the one for whom they are intended. The final recipient may take to them kindly and may not. It is the exception to the rule that always makes the world go wrong—the one whose thought processes you can never exactly foretell. All one can do with an individual of that variety





is to guess—and there is usually only one guess allowed, and that a wrong one. Cut down the per cent of wrong guesses, and an executive is an executive in fact as well as in name. To be able to tell beforehand just what a person will do under known conditions, and to modify or make allowances for that individual, is sometimes called "charity," but more often in the business world "tact." This a chief operator must have and combine with a knowledge of the business; and then a traffic chief can go home at night, ring for his wife to bring his slippers, and sit content, knowing that all is well, has been well, and will be well.

THE SUPERVISOR

What is a supervisor? Many an operator in her thinking moments perhaps has modified that to read—Why is a supervisor? But also that same operator, if she still is in that thinking mood, will be able to answer that question even before it is asked. In every large organization there must be supervisors-those who train and help the beginners to seek responsibility and progress. Things move fast in this world, and change is ever present, and the operator of today is often the chief operator of tomorrow. Inasmuch as a chief operator can not deal with each operator individually throughout the day, there must be some one available to guide and help. That person is a supervisor.

Supervisors, more than chief operators, can conform to type in any one exchange. The example of any one of them — whether that example be good or bad—can influence the actions of the others. The "go-to-it-girls" type, if she be seemingly successful in her methods, has her following and adherents. So has the pleading, wistful voiced "please, girls, let's do better today." The happy medium between the two types should have the largest following and usually does.

With an efficient, ever watchful, willing, and diplomatic corps of supervisors, a chief operator can in her turn go home at the end of a day, ring for her dancing pumps, and rest assured that this is the end of a perfect day.

THE OPERATOR

She represents a question that has puzzled the philosophers, scientists, and general public for many a day. She is the "sweetest creature" or the "most impudent hussy"—all depending on the point of view. Both viewpoints usually have a basis in fact, though in theory the latter should be absent. But none of us are the same in business as we are at home. We may be "sweet" at the office and bitter at home. Of course it's never our fault—it couldn't possibly be.

An operator, because of her dealing with the public when that public is both at home and office, gets the two phases of human nature, whereas she is always at the office when bearing up her side of the conversation. The chances are ten to one that people, including operators, are always "sweeter" at the office than at home. We have to be—our jobs depend upon it. Therefore, the conclusion is this —the general public gets the benefit of that sweetness at the office-the exception being the case of the person (meaning operator) who is "sweeter" at home than at the office, or the one who has reversed temporarily her place in which to be "sweet." The odds are further against an operator because of the large proportion of nonworking, stay-at-home people who use the telephone and who do not leave home often enough to see how "sweet" they could be in an office. They are out of practice, in other words.

An operator is one of two things—an asset or a liability. She is an asset when she can maintain her self-control under all circumstances, no matter how great the provocation, and a liability when she can not. A business is solvent when its assets exceed its liabilities, and so a traffic chief, chief operator, and supervisor accept their paychecks with clear consciences when their asset operators exceed their liability operators.

4,500,000 Calls Daily

Over 4,500,000 telephone calls are made in New York City daily. What this means may perhaps be more readily appreciated by comparison with a combined total daily average of about 2,550,000 telephone calls in all the cities and towns of Great Britain.

The telephone conversations which take place every day over the wires of the Bell Telephone System require in the aggregate an amount of time equivalent to two hundred years.





A Few New Coast Division Estimates

In the belief that our readers are glad to hear of new projects that provide for growth or furnish additional facilities, we are listing several important estimates now actively under way in the Coast Division.

The construction department is completing its work at Hayward under estimate No. 30319 and will probably be out of this town during the month.

Estimate No. 30441 has just been received. This covers the replacing of the present five sections of 105A magneto switchboards at Pittsburg, with four sections of No. 9 common battery switchboards, together with associated equipment, including chief operators' desks and wire chief's desk. It is expected that this new equipment will take care of the growth of this exchange for the next three years.

Foremen Manders and Baber and crews are now engaged on estimate No. 30372, Sausalito-Petaluma toll-pole line and aërial wire construction, which provides for the construction of three toll circuits from Sausalito to Petaluma and one toll circuit from San Rafael to Novato. The work consists of replacing 259 poles, placing 530 crossarms, 90 circuit miles of No. 104 copper wire, creating 45 miles of phantom circuits, and removing 11 loop miles of No. 109 iron wire.

Estimate No. 30392 provides for the installation of a 48-quad, 19-gauge loaded cable from Third and Channel streets, San Francisco, to South San Francisco, to furnish facilities required to meet the increase in traffic between San Francisco and South San Francisco, San Mateo, and Burlingame. The work involves placing 51,000 feet of aërial and underground cable, 10-27-E loading cases, 24 poles, 200 cable arms, 50 anchors, and other minor reinforcements. All the cable for this project is on hand and the crews are now working. The present facilities between these points are very much congested.

Estimate No. 30420, Redwood City ex-This estimate covers the exchange: change portion of a project involving the removal of toll and exchange telephone plant on Broadway from the State



COMPARING PRESENT-DAY EQUIPMENT WITH OLD PLANT

First telephone subscriber in Spokane, the man who installed his telephone, and Riverside chief operator and section "B" board, Riverside office, 1922. Reading from left to right-Walker L. Bean, prominent real-estate dealer (first subscriber); Thomas W. Elsom, present right-of-way agent; and Martha Krohn, Riverside chief operator.







A MIXTURE OF PLEASURE AND GLOOM

On the evening of October 4 a party was given by the operating employees of the San Diego district as a farewell to P. M. Grant, district traffic superintendent, transferred to Pasadena district, and as a welcome to R. J. Hadden, the newly appointed district traffic superintendent succeeding Mr. Grant. All of the central offices in San Diego County were represented. F. N. Rush, division superintendent of traffic, and J. H. Corcoran, general superintendent of traffic, San Francisco, also were present.

Highway to Main Street, and on Main Street from Holder Street to the Southern Pacific tracks, Redwood City, to comply with an agreement with Redwood City entered into September, 1919, whereby the telephone plant is to be removed prior to September 28, 1922. This estimate also provides cable relief to the sections of the Redwood City exchange where the present aërial plant facilities are inadequate to care for business now being offered. This estimate involves the placing of approximately 41 poles, 21,000 feet of various size 24 ga. aërial cable, 1600 duct feet of underground conduit, 1800 feet of 404 and 505 pr. 24 ga. underground cable, together with the removal of 42 poles and 15,400 feet of 22 ga. aërial cable. The contractor is now engaged in placing the subway and requisitions have been placed for the necessary material.

Estimate No. 30429 provides for the installation of two 1200 pair U. G. cables from the West Central office, San Francisco, to provide outside plant facilities for a transfer of development from Market to West district, involving the area bounded by Gough and Steiner streets, Hayes Street and Golden Gate Avenue.

This cut, involving approximately 723 lines, is made primarily for the purpose of relieving a congestion of central office equipment in Market office and will incidentally furnish cable relief in sections of Market and West offices. Requisitions have been placed for the necessary cable and material and work will be started upon its arrival.

Ah, Ring Off

"Pa, when telephone operators retire why don't they go into the jewelry business?" asked Clarence.

"What are you driving at now?" asked his dad.

"Well, you know they get an awful lot of rings while they are on the job," grinned Clarence as he headed for the stairs.—Exchange.

My talk is to deal with the management of the dining service department of The Pacific Telephone and Telegraph Company, which company, as many of you know, is a public utility engaged in furnishing local and long-distance telephone service in the states of Washington, Oregon, California, and a part of Idaho and Nevada.





Employees' Plan of Representation Emblem

At the last meeting of the general committee of the Employees' Plan of Repre-



sentation, the suggestion was made that an emblem pin be provided for district committee members, the purpose of the

emblem to be that of indicating that the wearer was serving or had served as a representative of the employees in her district. In accordance with the suggestion, an emblem has been designed and distributed to district committee members during the month of October.

A cut of the emblem is shown at the top of this article. The emblem is of gold and is faced with black enamel. Set in the enamel are four gold bells with the letters "E. P. O. R." set in between the bells as shown in the cut. The initials of the owner are stamped on the back of the emblem.

The emblem is a sign that the wearer has been chosen by her associates to represent them and that she has given or is giving her time and efforts on matters of mutual concern to the employees and the management. The emblem is also a sign that the wearer has the respect and esteem of her associates, and this means a great deal in this busy world of ours.

The emblems are distributed as soon after the election of a district committee

member as the emblem can be obtained from the jeweler, and should be forwarded within ten days after the election.

Alexander Graham Bell Made First Wireless Telephone Apparatus

Having enjoyed the distinction of being the first man in the world to discover the way to make the wires talk, Alexander Graham Bell then proceeded to make the telephone talk without wires and in 1880, five years after he had invented the speaking telephone, he succeeded in transmitting speech by means of light rays by the use of telephone apparatus which he called a photophone. This was the first wireless telephone.

Doctor Bell also developed later another type of telephone which he called a thermophone based on the radiation of heat waves, and with this apparatus he was able to transmit speech for a considerable distance.

In 1915, the engineers of the Bell System, made extraordinary contributions to the wireless telephone art and with apparatus developed by them not only talked across the continent but from Arlington, Va., to Paris, France, and to the Hawaiian Islands, thus first demonstrating the great possibilities of radio transmission and stimulating public interest in the subject.



CONSIDERED ONE OF THE BEST EXHIBITS IN THE SHOW

Our booth in the second annual electrical show held in Tacoma during September. A manhole which contained 600- and 1200-pair cables, a display of the component parts of a desk telephone, and a pole lead were features of our exhibit.





A New Plant Building in San Diego

During the last few months a new building has been constructed at 1009 G Street, San Diego, for the use of the plant department forces. The building, which has a floor space of 14,000 square feet, has been designed and built according to the plans of the local plant people, and is very well arranged to facilitate the saving of time and labor in completion of plant work.

A garage 60 feet by 100 feet occupies one side of the building. A new type of truss roof has been used, which eliminates the necessity of any posts or pillars in the garage. The shop, which is a complete unit, with the usual drill press, lathe, air compressor, and other necessary machinery, is located in the front of the building, making unnecessary the use of artificial light during the day hours. The garage office is also located at the front part of the building, so that the foreman can easily keep in touch with the shop and at the same time check cars in and out of the main entrance.

The plant storeroom occupies the bal-

ance of the first floor, and is 40 feet by 100 feet in size. A great deal of thought has been used in the planning of this room to make it as convenient as possible. Supplies are received from the street on one side of the building, and by means of a door and counter between the storeroom and garage are delivered direct to the various company trucks. This arrangement allows a supply clerk during the night hours to recover and disburse all material needed for the next day's work, preventing any loss of time by the outside forces.

An instrument room occupies one side of the storeroom, in which subscribers' sets are cleaned and tested for reuse or packed for shipment to be repaired by the Western Electric Company.

On the second floor of this building is located the district plant chief and his people, consisting of the forces of the assignment clerk, the supervising foreman, and district wire chief. The resident engineer also has his office at this location.



PLANT ASSOCIATION CLUB ROOMS, SAN DIEGO

A glass of water on the speaker's stand, player rolls on the piano, dominoes and cards on the small tables and comfortable chairs combine to make this meeting room of association men worthy of note.







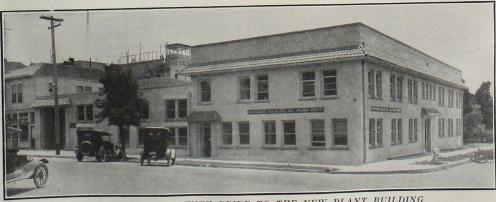
INTERIOR NEW SAN DIEGO GARAGE

The rear portion of the second floor has been assigned to the plant associations as a clubroom. This room is 40 feet by 40 feet in size. It is furnished with 72 tablet armchairs, which are designed for school work, but which are equally as well suitable for the serving of lunches. One side of the room has been furnished as a lounging-room and Jacobean oak library table, rockers, chairs, Wilton rugs, tapestry curtains, etc., have been provided. The association members have recently purchased and placed a player piano in this room as well. The clubroom has an oak floor, and at the first plant department dance of a recent date this floor proved to be just right for dancing, and many good times are planned for the future by the plant department employees.

Opening into one side of this clubroom is a ten- by ten-foot kitchen, which is completely furnished with cooking ware, dishes, silverware, gas plate, and all the necessities of an up-to-date clubroom kitchen.

This is the first permanent clubroom quarters to be provided in Southern California, and the San Diego employees are very proud of their new home, and wish to take this occasion to extend an invitation to all telephone employees to visit plant headquarters whenever they may come to San Diego.

When a woman finds time for reflection—she looks in a mirror!—Life.



SAN DIEGO POINTS WITH PRIDE TO THE NEW PLANT BUILDING







"Service Emblems" Issued During the Month of October, 1922



Forty Years' Service— George J. Petty, San Francisco, Cal. John H. Downing, San Francisco, Cal.

Thirty-five Years' Service— Henry Tyler, Stockton, Cal.

Thirty Years' Service— John F. Dolan, Nevada City, Cal.

Twenty-five Years' Service— Riley C. Waller, Albany, Ore. Julius H. Ross, Oakland, Cal. William Stromberg, San Francisco, Cal.

Twenty Years' Service—
William W. Fitzpatrick, Los Angeles, Cal.
Kathryn Carpenter, Los Angeles, Cal.
Achille J. Lafranchi, Marysville, Cal.
Charles M. Mantor, Sacramento, Cal.
T. A. Brooks, San Francisco, Cal.
Harry Lohman, San Francisco, Cal.
Nellie S. Orr, San Francisco, Cal.

Fifteen Years' Service-Walter C. Case, Los Angeles, Cal. Clara B. Niehaus, Los Angeles, Cal. Edward H. Reid, Oakland, Cal. William C. Allen, Pasadena, Cal. George A. Jillson, Pasadena, Cal. Bertha E. Dahler, San Francisco, Cal. Mary L. Fitzgerald, San Francisco, Cal. Alice C. Hyde, San Francisco, Cal. James T. McMenomy, San Francisco, Cal. Frank L. Miller, San Francisco, Cal. John J. A. Mulvany, San Francisco, Cal. Maud Skaggs, San Francisco, Cal. Frank H. Deimel, San Rafael, Cal. Lawrence Nicholes, Seattle, Wash. Margaret E. Scott, Seattle, Wash.

Ten Years' Service-Ozelda Dandurand, Los Angeles, Cal. Minnie Judson, Los Angeles, Cal. Frida O. Larson, Los Angeles, Cal. Margaret A. Penrose, Los Angeles, Cal. Helen Williams, Los Angeles, Cal. Nellie V. Wright, Los Angeles, Cal. Marie M. Chandler, Mt. View, Cal. Mary A. Dryer, Oakland, Cal. Mary A. Duffy, Oakland, Cal. Margaret B. Colbert, Pasadena, Cal. Theresa Ranker, Pasadena, Cal. Edna M. Cook, Pendleton, Ore. Essa McCallum, Pt. Arena, Cal. Helen Estus, Portland, Ore. Bertie Webster, Portland, Ore. Marina C. Romero, Sacramento, Cal. Eva Hawes, San Diego, Cal. Carrie Van Syckel, San Diego, Cal. Rose Camou, San Francisco, Cal. Elizabeth M. Carruthers, San Francisco, Cal. Mary M. Cox, San Francisco, Cal. Effie Hanson, San Francisco, Cal. Rose Harris, San Francisco, Cal. Alice L. Isaacs, San Francisco, Cal. Mae M. Kelly, San Francisco, Cal. Mae Kerrigan, San Francisco, Cal. Olga G. Klein, San Francisco, Cal. Louise Maynard, San Francisco, Cal.

Lillian C. Otto, San Francisco, Cal. Edna Stoddard, San Francisco, Cal. Constance M. Vincent, San Francisco, Cal. Ethel A. Willson, San Francisco, Cal. Mercie E. Wilson, San Francisco, Cal. Edna E. Watson, Seattle, Wash. Kate Hedger, Spokane, Wash. Marian Johnson, Spokane, Wash.

Five Years' Service-Arline B. Hamilton, Berkeley, Cal. Minnie P. Creason, Colton, Cal. Eleanor M. McManus, Eureka, Cal. Lois Knight, Fresno, Cal. Lora Stevens, Fresno, Cal. Catherine A. Leete, Huntington, Ore. Lulu J. Bills, Los Angeles, Cal. Florence E. E. Bowers, Los Angeles, Cal. Genevieve Butler, Los Angeles, Cal. Hettie E. Clifford, Los Angeles, Cal. Ella A. Corsen, Los Angeles, Cal. Hazel Edmiston, Los Angeles, Cal. Lenore A. Foster, Los Angeles, Cal. Barbara Martin, Los Angeles, Cal. Helen Miller, Los Angeles, Cal. Consuelo Palmero, Los Angeles, Cal. Catharine A. Reeb, Los Angeles, Cal. Sibyl I. Rice, Los Angeles, Cal. Josephine Richardson, Los Angeles, Cal. Josephine Richel, Los Angeles, Cal. Rubidean G. Roschman, Los Angeles, Cal. Helen L. Smith, Los Angeles, Cal. Vera P. Smith, Los Angeles, Cal. Marguerite Sohns, Los Angeles, Cal. Mary A. Spalding, Los Angeles, Cal. Anna L. Streeter, Los Angeles, Cal. Flavilla O. Streeter, Los Angeles, Cal. Edith M. Thurman, Los Angeles, Cal. Fay E. Weaver, Los Angeles, Cal. Hattie R. Zink, Los Angeles, Cal. Mamie Perez, Martinez, Cal. Grace McGivney, Oakland, Cal. Ruth R. Downing, Ojai, Cal. Doris E. Barrows, Richmond, Cal. Helen M. Olsen, Portland, Ore. Myrtle Link, Sacramento, Cal. Victoria L. Musso, Sacramento, Cal. Lydia A. Rodness, Sacramento, Cal. Lobelia C. Bergman, San Francisco, Cal. Mabel E. Bryant, San Francisco, Cal. Rose F. Mesusan, San Francisco, Cal. Helen E. Milne, San Francisco, Cal. Eva M. Porter, San Francisco, Cal. Hattie E. Rietzler, San Francisco, Cal. Elfrida A. Savage, San Francisco, Cal. Ellen M. Sullivan, San Francisco, Cal. Laura J. Summers, San Francisco, Cal. Dorothy M. Benecke, San Diego, Cal. Dorothy M. Benecke, San Florence I. Holle, San Diego, Cal. Elizabeth M. Gardiner, Santa Rosa, Cal. Lucille Brady, Seattle, Wash. Lucille Brady, Seattle, Was Carrie Jones, Seattle, Wash. Mabel Sawyer, Seattle, Wash. Clara Stuestall, Seattle, Wash. Alice F. Supplee, Seattle, Wash. Lillian Vallquist, Seattle, Wash. Zena Hagen, Spokane, Wash. Freda T. Jacobsen, Tacoma, Wash. Beulah A. Stone, Tacoma, Wash. Martha E. Payne, Yreka, Cal.





A New Type of High-Power Vacuum Tube

There is an old saying to the effect that success in little things leads to success in big things. The author of this maxim probably wanted to express the fact that a little job well done prepares the way for the doing of a big job.

It is not exactly this kind of a situation that we shall consider here, but the old saying seems, in a sense, applicable. Here is a case in which the successful development of a very small piece of apparatus paved the way for the successful development of a very large piece. To the uninitiated there may seem to be little connection between the tiny switchboard lamps which flicker on the modern telephone switchboard and a vacuum tube (using this term in the sense in which it is applied to telephone repeater tubes) which requires a 250-horsepower engine and electrical generator of corresponding size to keep it supplied with electrical energy. As every telephone employee knows, the switchboard lamp is scarcely as big as a peanut while the large vacuum tube, which in a way is its descendent, many generations removed, is about three feet long and four to six inches in diameter.

Now a word as to what this enormous vacuum tube does. Its principle of operation, from an electrical point of view, is identical with that of the telephone repeater tube. It can, therefore, be used to generate high frequency oscillations, to detect them, and to modulate them as repeater tubes are called upon to do in carrier telephone and telegraph sets. The large tube may also be used as an amplifier.

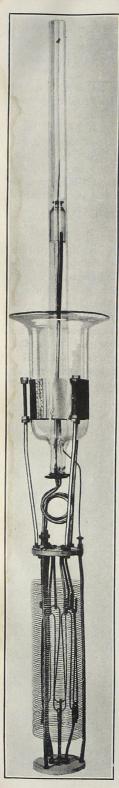
The difference between the large and small tubes, therefore, lies in their different electrical capacities and not in difference of principle. When used as an oscillator to generate high frequency electrical oscillations, the big tube is capable of an output of fully 100 kilowatts. Just what this means can be gathered from a comparison with the oscillating tube in a carrier set. The latter, under normal conditions, might be capable of developing one watt of



W. G. HOUSKEEPER OF THE BELL SYSTEM RESEARCH LABORATORY







high frequency energy. In figures, then, the large tube is 100,000 times as powerful as the small.

Needless to say, these new tubes will not be used in carrier sets and as telephone repeaters. However, there are various important uses in sight for them, particularly in connection with radio telephony, and to these we shall return later.

Let us look for a momentatthe sequence of events which has caused switchboard lamp to give rise to such enormous progeny. Several years ago W. G. Houskeeper of the Bell System research laboratory at the Western Electric Company in New York City became interested in cheapening the manufacture of switchboard lamps. One of the things he aimed to accomplish was the elimination of platinum wire, which was being used for the leads to bring the filament heating current through the glass wall of the lamp. His study showed him that copper wire possessed one of the requirements necessary to a vacuum tube seal when through

glass This requirement is that the molten glass "wet" or adhere closely to the wire. Another requirement, of course, is that the wire should not cause the glass to crack upon cooling. Now platinum and glass contract about equally upon cooling, and the glass is not strained sufficiently to crack. Copper and glass, however, have quite different coefficients of expansion with regard to temperature, and Mr. Houskeeper found, after many trials, that only by giving the copper wire a peculiar cross-sectional shape could he prevent cracking.

His success with the very fine copper wires which he was using as leads for his experimental switchboard lamps led him to study other and bigger types of seals between glass and copper. Prolonged study led him to bring some of these to enormous sizes compared to seals which had previously been made.

It was about this time that it became apparent to the Bell System engineers who were interested in the development of radio apparatus that vacuum tubes of very much greater capacity than those which had ever been used would find applications in future. One of the major problems connected with the building of a successful high-power vacuum tube has to do with the removal of the heat generated in the tube during operation. In the small tube the removal of this heat can be taken care of by radiation. But experiments showed that, with present known methods of construction and using a glass bulb as container, a radiation cooled tube could not handle more than one kilowatt or possibly two. This fact indicated that the desired solution of the high-power tube would involve some auxiliary means of cooling, as by a circulating stream of water. To employ water cooling successfully requires that those metal parts that are most subjected to heating (the plate or anode) should come directly in contact with the cooling water.

In the early experiments in the research laboratory various types of water-cooled tubes were tested. The most promising of these involved the use of a small platinum tube as anode. This tube was closed at one end and opened at the other to admit the stream of cooling water, the grid and filament being



. Che. Pacific · Telephone · Magazine





THE INTERNAL ASSEMBLY OF THE 100 K. W. WATER COOLED TUBE
W. G. Houskeeper pointing out one of his remarkable metal-to-glass seals, here used to conduct
the 91 ampere filament heating current through the glass wall of the tube

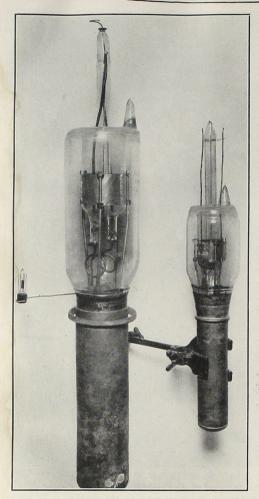
placed outside of the tube and concentric with it.

After a thorough investigation of the platinum anode tube, the engineers turned to the large copper seals as a possible key to the making of high-power tubes, and Mr. Houskeeper's experience with these seals qualified him to take part in this phase of development. As a result of many experiments, a tube designed successfully involving copper seals has been worked out and is quite clearly illustrated by the accompanying photographs. The plate, instead of being supported within a glass bulb, in the new tube takes the form of a large copper thimble with thin walls. This is attached by a vacuum tight seal to a glass structure which supports the filament and grid and through which the lead wires are carried. As shown in the photographs the filament lies within the cylindrical grid and this whole structure is placed within the copper anode and concentric with it. The cooling water is circulated around the outside of the anode and does not enter the evacuated space within. It is, of course, necessary that the anode be very free of minute holes which would tend to admit air or water vapor, a requirement which had led to the drawing of anodes from a single disk of copper.

At present the new water-cooled tubes are being constructed in two sizes, the large one already mentioned, which is capable of delivering 100 kilowatts, and a small one whose capacity is ten kilowatts. One of the accompanying illustrations shows these two tubes side by side and for the sake of comparison a







EXTREMES IN VACUUM TUBES

In the center the 100 k. w. water cooled tube, on the right the 10 k. w. water cooled tube, and on the left the little "peanut" tube (Type H.) whose filament can be lighted with a single dry cell. The filament heating current of the 100 k. w. tube is 91 amperes.

third tube has been included which is the smallest one being manufactured and which is popularly known as the "peanut tube."

A few figures in regard to the 100 kilowatt tube may be of interest. The anode is 14 inches long and 3.5 inches in diameter. The filament is of tungsten wire and is .060 of an inch in diameter and is 63.5 inches long. The current required to heat the filament is 91 amperes and the power consumed in it is 6 kilowatts. The filament leads are of copper wire ½ of an inch in diameter and are sealed through the glass wall by means of

a special disk seal. To those who are at all familiar with glass blowing, it will be apparent that the handling of the parts of this tube during manufacture presents a task of no mean magnitude, and numerous fixtures have been devised to assist in the work.

The significance of this tube development to the radio art can scarcely be overestimated. It makes available tubes in units so large that only a very few would be necessary to operate even the largest radio stations now extant with all the attendant flexibility of action which accompanies the use of the vacuum tube.

From the standpoint of radio telephony, the development of these highpower tubes makes possible the use of very much greater amounts of power than have ever been readily available before. The 100 kilowatt tube by no means represents the largest made possible by the present development. There is no doubt that if the demand should occur for tubes capable of handling much larger amounts of power they could be constructed along these same lines.—

R. W. King.

Telephone Demand Increases

In a statement accompanying the one hundred and thirty-second dividend, President H. B. Thayer of the American Telephone and Telegraph Company said:

The demand for telephones grows faster than our population. It is an intensive growth; an increasing percentage of the population is seeking telephone service. It is a function of the American Telephone and Telegraph Company to study the future requirements for telephone facilities and to coöperate with the associated companies of the bell system in provision for adequately handling the new business as promptly and economically as possible.

To take care of new telephone business, approximately \$175,000,000 worth of new telephone plant—Consisting of land, buildings, switchboards, cables, toll lines, and telephone instruments—is built by the Bell System annually. These new telephone facilities mean additional revenues and increase the value of the service to all telephone subscribers by increasing the number of people with whom each subscriber can talk.

In view of the needs of the business, the company offered to its stockholders of record on September 8, 1922, additional stock in the proportion of one share of new stock to five shares of stock then outstanding. As stated in advising such stockholders of the details of this offer, this substantial issue makes any further issue of stock to stockholders improbable for a considerable period to come.





What Do You Eat?

In the larger offices of the company, dining-rooms have been provided where the operating employees may obtain wholesome meals at a nominal cost.

A well-balanced menu is regularly provided and a healthful diet is always obtainable. What may please the taste of one employee, and agree with her, may not, however, please or agree with another, and it is expected that each will exercise proper discretion in the selection of food suitable to physical requirements as well as those of the appetite.

Many inquiries have been made by employees regarding the general subject of dietetics, and it is in response to these inquiries that the following notes are published with the hope that they may be helpful to all in the selection of food suitable to their individual requirements, both in the company lunchrooms and elsewhere.

FOOD COMPOUNDS

Foods have been divided, according to their use in the body, into five classes called food compounds. These five essential food compounds are: Proteids, fats, carbohydrates, mineral matter, and water. A proper proportion of each is necessary to bodily health and vigor, and while it is not essential to measure exactly the required amounts for every meal, it is evident from the following that a diet reasonably balanced in the compounds is of great importance if the body is to be maintained at its highest efficiency.

Proteids—Proteids furnish the building and repairing material. They are sometimes called "body bricks." Tissues are constantly worn out and must be replaced by foods which contain a large proportion of protein, such as milk, eggs, lean meats, cheese, beans, and nuts.

Fats and Carbohydrates—Fats and carbohydrates are the fuel foods, the "coals" for the production of bodily warmth and energy. Fats commonly appear in the diet in cream, butter, fat of meat, and vegetable oils. The carbohydrates are starches and sugars. Rice, tapioca, cereals, and flour are common examples of starch; while sugar is found in many vegetables, as carrots and beets, and in



AN ATTRACTIVE RESTROOM

At Hollister, Cal., the young ladies of our office spend their spare minutes in this pleasant and comfortably furnished room.





WELL-BALANCED M BREAKFAST— Fruit—Apple Orange Strawberries 2 slices Toast, buttered 2 Eggs 1 cup Coffee 1/2 oz. Cream 30 Sugar 48 1 cup Tea 1/2 oz. Cream 30 Sugar 48 1 glass Milk Lunch— Soup—Cream of Corn Cream of Asparagus Cream of Tomato 1 Cracker, graham 1 Cracker, soda Cracker, soda Cracker, soda Cracker, soda Cracker, soda Cracker Cream of Corn Cracker, soda Cracker, soda Cracker, soda Cracker, soda Cracker Cracker		76 200 150 78 504 131	30 200 150 120 500	Cream of Vegetable Entrée—Beef re Mutton Codfish Potatoes	f Barley f Tomato e oast leg, boiled Asparagus corn, green caroni or paghetti pudding olate layer cake. apple oz. Cream30 gar48	120 464 100 25 100 139	144 207 100 100 100 250	69 104 100 438 100
1 Sandwich { Bread100 Butter114	205	305	305	(oz. Cream30 gar48		78	100
(Ham 91	305 500	446	449	r cup mirk	•••••	1,026	979	$\frac{120}{1,281}$
GIVE ME MAIN 6743, YES PLEASE MAIN 6743 YES PLEASE YES 6743								
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AS OTHERS SEE US

This amusing cartoon appeared in the Los Angeles "Record" recently and gives General Public's mental reaction upon being advised that a line is in difficulty.



· Che. Pacific · Telephone · Magazine



sweet fruits and in honey, as well as in cane and beet sugar.

Mineral Matter — Mineral matter is necessary for bone formation, and for the general "toning-up" of the system. Although it is present to some degree in most all foods, fruits and vegetables are especially valuable for the mineral elements which they contain.

Water—Water ranks as food because it enters into the composition of every tissue, even bones and teeth. It regulates the body temperature, and plays an important part in all nervous and muscular work.

The body is often compared to an engine. While it is more highly organized, it burns food and converts it into energy for muscular activity much as coal, water, etc., are used for the production of energy in a steam engine.

CALORIES

It is not difficult to determine the energy value of a ton of coal, the distance it will carry a train of cars or a steamboat. Scientists have also been able to measure the amount of energy produced by the consumption of various foods in the body. The unit which they use for this measure is the calorie.

About 2000 calories are required each day by the average woman, weighing approximately 125 pounds, and engaged in work such as telephone operating. These 2000 calories, however, should be obtained by the proper combination of food compounds.

Following is a list of readily procurable foods classified according to their compound characteristics and showing the number of calories of each required:

PROTEIDS

About 200 calories daily

Milk, Cheese, Eggs, Lean Meats, Fish, Poultry, Dried Beans and Peas, Nuts, etc., etc.,

MINERAL MATTER

Eat freely

Apples, Pears, Bananas, Berries, Oranges, Lemons, etc., Lettuce, Celery, Spinach or Greens, Green Peas and Beans, Tomatoes, Squash, etc., Potatoes, Beets, Carrots, Parsnips, etc.

FATS

About 600 calories daily

Butter, Cream, Lard, Suet, Salad Oils, Bacon, Salt Pork, Etc., etc., etc.

AN OLD-TIMER

This is a photograph of the first switchboard installed in Spokane. The job was completed in the summer of 1886.

CARBOHYDRATES

About 1200 calories daily

Rice, Tapioca, Cereals, Flour, Bread, Crackers, Macaroni, Potatoes, Sugar, Molasses,

Preserved Fruits, Jellies, Puddings, Candy, Cakes, Etc., etc., etc.

WATER Drink Freely

If something is chosen from each of the groups listed above, the essentials of an adequate diet will be obtained.

FOOD VALUES IN CALORIES

Following is a list of food items taken from each class of food compounds, and showing the portions of each required to make approximately 100 calories:

Approximately 100 calories are contained in each portion shown hereunder

4 Prunes, 2 Apples,

1 large Orange, 1 large Banana,

½ Cantaloupe, 7 Olives,

1 Shredded Wheat Biscuit,

1 large Egg, 1 small Lan

1 small Lamb Chop, 1 small dish of Baked

Beans,
1 small dish of Sweet
Corn.

1 large Baked Potato, 3 oz., 1 large Boiled Potato,

4 oz.,

1 small piece of Sponge

Cake, ½ of a piece of Pie, ½ cubic in. Cheese,

1½ oz., 12 Peanuts,

8 Pecans,

¼ glass of Cream 1 small glass of Milk, 3 teaspoonfuls Sugar,

1¼ lumps of Sugar, 1 slice of Bread,

1½ ounces Butter.

Page Twenty-five





THE PACIFIC TELEPHONE MAGAZINE

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Let Us Give Thanks

Thanksgiving—the first heat in the annual holiday handicap; the beginning of the American open season for turkey, cranberry sauce, and mince pies, and a lot of extra hard work for our women folks in the culinary department.

On this particular day, the last Thursday of this month, there will be feasting among us, much merrymaking, and considerable football, while the more seriousminded of our people will let their thoughts revert to that day when our Pilgrim forefathers knelt upon the rocky shores of the new continent and, in praiseworthy manner, raised their voices in solemn thanksgiving. Since then, practice, presidential proclamation, and the grateful hearts of a happy, prosperous people have been instrumental in perpetuating the custom.

We may well, upon this occasion, take mental inventory of our stock in trade. The year is rapidly drawing to a close. Its days have been spent in peace, for no war has threatened our land. As employees, we are engaged in a laudable service, and as our nation grows so do we prosper. For these and innumerable other blessings, let us return thanks. With those of our family, our friends, and business acquaintances, it is fitting that, upon this day, we enter into the spirit of Thanksgiving and offer up a word of supplication to Him from whom all blessings flow.

The Straight Line

THE PUBLIC is emotional. There seems to be a welcome and a hearing for every fad and theory. We are told how to think, act, eat, and sleep. Champions of this and that appear with enthusiasm unabated until something else catches their fancy. We are given a formula for everything we have and for everything we don't have. First, no liquids, then no solids, then vice versa, and then stand on your head in a corner. Eat a cake of yeast and conquer the world. Soon we may hear of the merits of sawdust. In the papers we are shown photographic enlargements of bacilli with horns, hairy legs, barbed bills, full poison equipments, and decidedly unfriendly faces, and are told that each one of us is probably acting as a warehouse for a million or so. Damage, however, can be avoided by following a given course of conduct, ranging from the exercise of the reflex vehicular muscle to the use of the Acme Eclipse Violet Bulb.

The foregoing pertains to the physical part of our existence, and of late there has appeared another wave of suggestion directed to our mental situation. Books, periodicals, and the multi-colored Sunday supplement are all telling us what we can do if we will only do it. Though our memory may not be accurate, in this literature the titles have sounded something like "Power Through Success"-"My Will and Yours"-"How to Win at Home"-"The Subconscious Determination"-"The Secret of Sway"-"Yesterdays in Self-Analysis"-"Controlled Inefficiency"-"The Impulse of the Ego"-"Why Not?" "Psycho" is an overworked prefix.

The first axiom before the pupil in geometry is "a straight line is the shortest distance between two points," and the straight lines of simplicity and wholesomeness are the shortest roads to the possession of health and character. No quacks or dreamers can give them to you. They come from within and not from without. You can secure health—can even restore it—by right living, by temperance in all things, and by an adherence to laws which you know. You can secure character by right thinking and acting and by a consideration of the consequences which you know are

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inevitable when certain things are done or not done by yourself.

Each individual must strengthen his own will. Self-reliance disappears with too much assistance. Before action or inaction there is the determination of the will. This has to be developed in the individual brain. It can not be found as a ready-made creation in a book. There is no particular nutriment in a bill-offare. The farmer can sit on his porch reading works on agriculture, but no harvests will follow without some perspiration and the bent back.

The suggestion of this editorial is meant to be only this-what you are and what you will be depend on yourself. Culture, logical thinking, proficiency in your work, and those qualifications which give you comfort, the respect of the world and even its rewards, will not be brought to you by any one else. They can not be superimposed on your individuality by outside means. It is true that you may gain from the experiences of others-sometimes by imitation, sometimes by avoidance-but a guideboard does not take you over the road. You will have to travel the distance with your own courage and endurance. The chart will not take you into the harbor. You will have to set your own sails and hold the rudder of your conduct to the star of your ambitions.

Look at Yourself

BEFORE LEAVING the home in the morning it is probable that the ordinary individual takes a good look in the mirror. Is the tie properly adjusted—is the hair smoothed—any dust or specks on the clothes, etc.? We have an implicit confidence in the mirror. We know that it doesn't deceive—it isn't even hypocritical. If the hair is tousled, it tells us so, and without thought we reach for the comb and brush.

We are promptly concerned with our personal appearance. Neatness of person and apparel is an asset which should never be neglected, and we rely on the looking-glass to tell us how we appear to the world.

We certainly are as much interested in our individual situation, mental, physical, and material, as in external show. Of necessity we are living along definite

lines, and we ought to be as much concerned with the developing plot of life as in its scenery. Are we getting ahead? Are we saving for the rainy day? Are we improving our minds? Do we know more every day about our work? Are we adding to our qualifications and value to the company? Are we nearer the job ahead?

We have a mirror which will answer these questions with absolute accuracy—if it is used. It is clear and flawless. It is available every moment. It never distorts, conceals, or shows us anything but the truth. It is the mirror of our conscience. We often try to fool ourselves, try to avoid using it, the reason being generally that we are afraid or ashamed of its reflections.

On the one question—are you daily doing better work? This is of supreme importance, for it is your livelihood and directly affects your future. How absurd to ask a friend or associate "Am I making good, do you think?" or to wait for some intimation from the "boss," one way or another. Ask yourself—you know better than any one else. Why cheat in a game of solitaire?

Use this mirror of your conscience daily. You can not camouflage yourself, even if you would. If you have not "delivered," if you have been lazy, if you have not earned the money paid you for given results, this mirror will tell you so—immediately, emphatically, and unequivocally.

If you have not used this mirror for some time you may be surprised—possibly frightened, but it will nevertheless be beneficial. Mistakes sometimes have their value if they are recognized. There may be some profit in errors if an appreciation of results means their elimination in the future.

Following the suggestion of the truths disclosed by the household mirror will mean the desirable situation of a good appearance to the world. Let the reflections from your conscience mirror mean a satisfactory appearance to yourself.

Brown—I'm the most forgetful man in the world.

BLACK—Why don't you buy a flivver? Brown—What for?

Black—That will jog your memory.— Portland (Me.) Express.





Washington Division Inaugurates Commercial Training Course

Realizing that only by having picked men, trained in their work and with an intimate knowledge of the relation of their work to the work of the entire organization, could the commercial department be assured that they were rendering the best service possible, both to the public and to the company, the Washington Division has inaugurated a commercial training course for both new and old employees, designed to give the employees the necessary training in all phases of commercial practices and at the same time outline the functions of the other departments in such a way as to give them the broad perspective necessary in rendering intelligent service.

In order that individual attention might be given each member, the classes are limited to from eight to ten employees each. A classroom has been fitted out with all equipment necessary to give the men the required training, including sets of instructions, forms, organization charts, blackboard, etc., and on August 16 the first class, composed of five new employees of the Seattle business office, was started.

J. E. Parrott, formerly toll salesman in the Seattle business office and at the present time associated with the division supervisor of methods in the division commercial superintendent's office, is the instructor in this training course.

These men, all having advantage of college training, were selected only after a careful survey of a number of applicants because of their character, educational qualifications, and adaptability to the work. Particular care was exercised with a view to obtaining men with initiative in order that they might be developed to "carry on."

The course is so outlined as to cover a period of five weeks of intensive training, the student's time being divided equally between class periods and observation periods on the work covered in the preceding class period.

The first step in the course consists of a visit to the various offices and properties of the company, to visualize the size and complexity of the plant and obtain an idea of the amount of business handled. Following this, the organization of the Bell System, The Pacific Telephone and Telegraph Company, and the business office is taken up in order that the students may learn the functions of the various departments and their relation to one another.

From this point the course is divided into two main subjects, designated as the sales period and the collection period, and in these periods the students are given, in their proper sequence, the fundamental principles governing each class of work.

Throughout the course particular attention has been given to instilling in the students the proper spirit of fairness and service to the public, and the importance



VIEW OF OUR SEATTLE COMMERCIAL CLASS ROOM

The instructor is preparing these students, from the Seattle business office, to render accurate, courteous, and efficient commercial service





of favorable public opinion is shown in every step throughout the course.

At the conclusion of each main period of the course, and at other times when thought necessary, the students are given examinations to determine what points, if any, are not thoroughly understood, and, in case a review of any portion of the instructions seems necessary, additional time is devoted to that particular instruction. Papers are prepared from time to time during the course by students giving their views on subjects assigned by the instructor.

Lectures by those in supervisory positions are given throughout the course, and at the conclusion of each of these lectures a general discussion of the subject involved is encouraged.

Through the splendid coöperation of all departments it has been possible to give the students an insight into the workings of the organization as a whole, which it is believed will result in increased efficiency to all concerned.

A Real Baseball Game

The baseball season for the year 1922 closed Sunday, October 8, with a game for the championship of the Inland Division between the "Sacramento Raw Meat Eaters," managed by "Wild" Bill LaBare, that eminent district engineer of the plant department, and the "Fresno Raisin Eaters," managed by that congenial individual, George Martin Dobel, wire chief, Fresno, ably assisted by "Smilin'" Jim Miller, district plant chief.

After nine exciting innings, Fresno won, 15 to 14.

A great deal of credit is due to the brainy, untiring side-line directions, not only to his players, but the umpires as well, of Manager Dobel, the erstwhile John McGraw of baseball fame.

"Happy" Bill Rollins of the office of division superintendent of plant pitched for Sacramento, Manager Preston of baseball renown, of Madera, pitched for Fresno, and both gave a good account of themselves.

For the "Raisin Eaters" Manager Britton of Porterville, the "Babe Ruth" of the San Joaquin Valley, got four hits out of six times up. Tommy Fairburn, the father of five children, made some wonderful catches in right field.

For Sacramento "Red" Rooney at short, Paul Rooney at second, with Harrison at the receiving end on first, made some snappy double plays. Frank McDonald of the outfield and Catcher Larke did some good batting.

Lyle Brown of the division commercial office, Sacramento, was one of the umpires, and "called them" as he "saw them." Like all great arbiters, he missed a few.

The game was on neutral grounds, at Ceres, Stanislaus County. An enthusiastic crowd of employees from all points in the valley were present, everybody having a good time.

The spring of 1923 will see another great battle between these teams. Even at this time all the boys are "rarin' to go," but unsettled weather conditions will not permit.

permit.				
THE SCORE				-
Sacramento— AB		R	BH	PO
P. Rooney, 2b 6		3	1	6
J. Rooney, ss 6		4	3	2
Miller, 3b 6		0	1	3
Harrison, 1b 5		0	0	8
McDonald, cf 6		3	2	. 1
Caffrey, If 4		2	3	0
Flint, rf 4		2	1	0
Larke, c 5		0	2	4
Rawlins, p 6		0	1	0
——————————————————————————————————————			_	-
48		14	14	24
Fresno AB		R	BH	PO
Sutton, 3b		2	2	4
Daniels, c		3	2	5
Kerner, 1b 5		2	1	7
Preston, p 5		3	2	1
Britton, cf, 2b 5		1	4	0
Adams, If 5		1	1	0
Matta 2h of 4		1	1	5
Walls, 2D, Cl		1	0	3
Johnson, ss 5 Fairburn, rf 4		1	1	2
Fairburn, Fi		_	_	_
41		15	14	27
BY INNINGS				
Innings— 1 2 3 4 5	6	7	8	9
Sacramento 2 3 1 0 0	2		2	1-14
Sacramento	4	3	0	x-15
Fresno 3 0 0 5 0				

Quick Finish

"See the farmer boy," said the smart city slicker.

"Well?"

"I wonder if that yap has ever been anywhere?"

"He's been in Germany and France."

And that ended that. — Louisville
Courier-Journal.

Lightning never strikes twice in the same place. It does a good job the first time.—Exchange.





Immense Construction Program of Southern Division

Although it is common knowledge among all divisions of The Pacific Telephone and Telegraph Company that an immense construction program has been under way in the Southern Division, there are many telephone men on the Pacific Coast who have not seen sufficient actual data regarding this program to allow them a comprehensive idea of its size and scope. For this reason a few facts and figures have been prepared for the purpose of drawing a rough picture of Southern Division plant department activities since January, 1922. through the cooperation and untiring efforts of all departments concerned has the work outlined below been accomplished.

Construction Department (Los Angeles)

Up to August 1, 1922, the cable department has received and practically placed in plant 172,000 conductor miles of both aërial and underground cable, or enough to extend a 25-pair cable between Los Angeles and New York City and still leave enough to run a single strand of wire around the earth at its equator. In addition, the following materials have been used by the construction department in the seven months subsequent to January, 1922:

Messenger strand (all sizes), nearly 1,547,000 feet, or over 290 miles.

Cable arms, nearly 8200.
Iron terminal boxes (all sizes), 5680.
Paraffin, 34½ tons.
Wiping solder, 35 tons.
Anchors (all sizes), 1742.
Cable rings (all sizes), nearly 834,000.

For some time the New York Telephone Company held the world's record for placing wire in plant during one week, with a figure of 17,080 conductor miles of wire of all types. During the week May 22-27, inclusive (5½ working days), the cable department in Los Angeles installed 29,280 conductor miles of wire in cable alone, or 12,200 miles more than the best previous record. This gives them an installation rate of eleven miles per working minute as compared with the previous record of somewhat less than six and one-half miles per minute.

Installation Department (Los Angeles)

(A) Line and Station Installation

Taking up first the work done by the station installers, the following orders were completed between January 1 and July 31, 1922:

A orders	(new installs)29,440
B orders	(removals or disconnects)19,497
F orders	(number changes, moves, etc.)26,689

However, the figures quoted above do not tell the entire story, since to complete these 75,626 orders of all classes it was necessary to handle 100,648 telephones. In this period a net gain of 10,154 stations was made, which, in connection with the above figures, shows that it has been necessary to handle ten telephones to make a net gain of one. This is in part due to the large number of number changes which have been necessary to allow for expansion of the system, but is primarily due to the great number of disconnects and move orders necessarily consequent on the large recent real estate and rental turnover in Los Angeles.

In the month of July alone, 10,928 orders of all classes, involving 15,125 stations, were completed, of which 5181 were "A" orders involving 6501 stations. During May (last figures available) the installers traveled 74,359 miles, or the equivalent of three trips around the world.

(B) Central Office Installation

The central office equipment installers and the Western Electric Company have also done an enormous job. From January 1, 1922, to July 31, 1922, inclusive, they have installed the following equipment:

150 Manual positions, 468 P. B. X. systems, 22,400 Connector multiple, 60,801 Line terminals.

Nearly one and one-quarter millions of dollars will be spent this year on automatic central office equipment for two projects alone, viz., Hollywood Project No. 51 and Olive Project No. 53. Nine carloads of automatic central office equipment, valued at \$789,000, have already arrived for these two projects alone, and nine more carloads are yet to come.





OTHER DEPARTMENTS (Los ANGELES)

No figures are available for the work done by the maintenance department, in so far as the construction program is concerned. They have had the task of running thousands of jumpers, making cuts and cutovers, as well as handling the problem of maintaining three interconnecting types of equipment, namely, manual, two-wire automatic, and three-wire automatic.

The accounting department and the department of shops and vehicles have both borne a heavy burden in putting over such a construction program.

The engineering departments have all been working at top speed in order to pave the way for the construction and installation forces. In the office of the division methods engineer graphs are kept from day to day of every estimate now scheduled, as well as a large map showing held orders and their location throughout the city.

In order to supply all departments with proper forces, the employment department has interviewed 14,826 applicants in the first seven months of the year. Another story will be told in a later issue regarding the performance of the plant department schools and their assistance in putting over the program.

OUTSIDE DISTRICTS AND ASSOCIATED COMPANIES

The work of the plant department, outside districts, Southern Division, can not, of course, be compared in magnitude with that of the Southern California Telephone Company. However, the figures and data given below show that the outside districts have been keeping on top of their projects, and fortunately have been able to secure sufficient material to meet all their commitment dates in various localities.

A few of the major items used during the first six months of 1922 are as follows:

Steel strand (all sizes), 457,181 feet. Cable boxes (all sizes), 1682. Cable rings (all sizes), 352,564. Wiping solder, 7½ tons.

Cable arms, 2786.

Cable, 443,826,160 conductor feet, or 84,057 conductor miles.

Copper wire, 3,382,627 feet.

During the period January 1 to July 1

they completed a grand total of 23,399 service orders of all classes.

With a force of 776 employees distributed throughout Southern California, south from a line drawn across the state from San Miguel to Delano (with the exception of Los Angeles City and a few other towns), telephone property approximating 82,950 stations, 24,000 miles of toll wire, and 2000 miles of toll pole line,



MODESTO CUTOVER

The stroke of 12 o'clock midnight, October 12, marked the passing of the old telephone office on I Street, Modesto, which has housed the operating department of The Pacific Telephone and Telegraph Company at Modesto for the last eighteen years. At that hour the new quarters in the new exchange building were cut into service and all traffic handled from the new exchange. The cost of the new telephone building and the new equipment, together with the outside plant work, totaled an expenditure of \$310,000. The audible ringing system and the new carrier system have been installed and additional toll lines built, thus bringing Modesto forward as the main toll center between San Francisco and Los Angeles. This cutover from old No. 9 board to No. 1 board in the new building involved 1429 subscribers' besides battery and generator pairs; 57 toll and leased lines. The thoroughness and dispatch with which this situation was handled is worthy of much favorable comment and the plant department is to be congratulated on its ability to "put over" such a job in so satisfactory a manner.





together with eighty-five central office exchanges, is maintained.

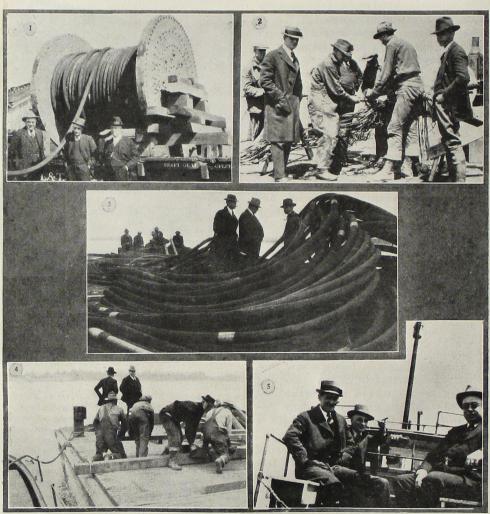
CONCLUSION

In conclusion it may be said that the purpose of this article is not to "brag" about the work done. The employees of the Southern Division, in keeping with the traditions of the Bell System, are simply doing all in their power to give "Service Without Stint."

Your mind, like soil, will produce nothing unless intelligently tilled — nothing, that is, but weeds.—Forbes.

Rather Embarrassing

In a radio broadcasting studio the absence of a visible audience often makes a singer forget that several thousand people may be listening to him. Such was the case with a soloist at one of the stations recently. A Western Electric engineer was "listening in" at the company's own radio station, and at the end of a fine tenor solo heard the singer say, in a perfectly audible aside, "How do you shut this —— thing off, anyhow?"



LAYING OF THE SUBMARINE CABLE ACROSS HUMBOLDT BAY

- 1. F. A. Brierly, T. Spiller, and Mr. Ward, commercial manager, Eureka, inspecting cable.
- 2. Charlie Deeble wiping up the joint and getting ready to cover up.
- 3. Mr. McTamany, Mr. Brierly, and Mr. Sheppard looking things over.
- 4. An exciting moment when deep water was reached. Mr. Brierly and Mr. Sheppard on the stern.
- 5. T. Spiller pointing out to Mr. McTamany and Mr. Brierly the interesting points on Humboldt Bay and a good place to start laying cable from.





Employees Render First Aid to Tourists

While on an inspection trip about six miles east of Golconda, Nevada, a short time ago, Combinationman J. O. Davis and Groundman A. Menicucci were hailed by a man running down the road, who excitedly explained that Mr. and Mrs. E. Polk of San Francisco had run off a thirty-foot embankment in their automobile about three miles further east. Davis lost no time in reaching the unfortunate persons, who were in a serious condition, Mr. Polk having two ribs broken and his wife a broken neck, still breathing, but in an unconscious condition.

Mr. Davis immediately administered first aid to Mrs. Polk in the form of an ammonia inhalant, which restored her to consciousness, whereupon she told him that her neck was broken. A temporary stretcher was made of a piece of canvas, together with a digging bar and shovel, upon which Mrs. Polk was placed in the Dodge truck and taken to the Pirson ranch near by-the home of two trained nurses. A doctor who had been summoned by telephone arrived in about forty-five minutes. Mr. Davis was highly complimented by the doctor and nurses for the efficient manner in which he handled the situation, and the doctor explained that any slight jar in such a case doubtless have meant instant would death.

Mrs. Polk was later moved to the County Hospital at Winnemucca, where she passed away the fifth day following an operation which it was hoped would save her life.

We are very glad to note that our employees are becoming so well versed in "First Aid" that they can successfully handle most any emergency.

Native Sons Are Interested in "First Aid"

At the request of Sutter Fort Parlor, Native Sons of the Golden West, of Sacramento, C. L. Sarver, plant methods engineer of our company, addressed the members of that body at their regular meeting held recently on the subject of "First Aid."

L. L. Harrington, delegate to New York at the time The Pacific Telephone Company Safety Code Book was finally adopted, assisted Mr. Sarver in giving a

number of demonstrations in the use of bandages and other first-aid appliances.

A great deal of interest was manifested by all present, and another invitation was extended Mr. Sarver to return at some future date and give further demonstrations.

Representatives from other organizations who were in the audience were so impressed by the importance of this movement that they also invited Mr. Sarver to deliver similar talks and demonstrations before their members.

"First Aid" and "Safety First" is receiving a lot of attention these days among plant employees of our Inland Division, and under the direction of Mr. Sarver and Mr. Harrington we are sure to see satisfactory results obtained.

Couldn't Find It

In Middletown, N. Y., there is a small job printing establishment owned by a man who is the proud father of a husky young son about fourteen. One day during the summer vacation the youngster paid his father a visit and was told by his father to scrub the basin in which the printers washed their hands. The boy asked his father what he should clean it with, and was told, "Sapolio and elbowgrease." A few minutes elapsed, and the youngster shouted, "Say, dad, I've found the sapolio, but I've hunted all over the shop and I can't find any elbow grease!"—Forbes.



OREGON TELEPHONE PEOPLE

Mrs. Mabel Walker, chief operator, Stanfield; Miss Thelma Kretzer, chief operator, Athena; Miss Julia Cook, commercial cashier, Pendleton; Miss Lois Gobbell, chief operator, Echo; and Miss Laura Boynton, chief operator, Hermiston, are shown left to right.

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Notes From the Divisions

Inland Division



A Sky-Line View of Sacramento, Division Headquarters

Division Superintendent of Traffic, O. Cole, Jr. Division Superintendent of Plant, E. H. Long. Division Commercial Superintendent, F. L. McNally.

Mary A. La Grande has been reëngaged at our Willows office.

Miss Rose Cheatham of Orland is a new student in the traffic department.

Minnie Stevens and Margaret Heller have recently been engaged at Redding.

Lavena Love, previously employed at Fresno, has been added to the Modesto operating force.

Miss Edna Hobron, Ethel Mox, and Irene Goldstein are recent additions to the force at Stockton.

Elizabeth Weaver and Mollie E. Cusick are recent additions to our Dunsmuir exchange force.

Miss Florence Higgins, cashier, commercial department, Modesto, resigned August 31 to take up other work.

Miss Rose Nelson has been appointed chief operator at Winnemucca, succeeding Mrs. Gertrude Lewis, who resigned.

E. E. Landis, former employment supervisor in the Inland Division, has been transferred to the chief engineer's office in San Francisco.

Miss Virginia Nied, previously with the Southwestern Bell Telephone Company at Minden, Neb., has been added to the toll force at Modesto.

Miss Emily Coffey, stub clerk in the Oakland accounting department, was transferred to the commercial department at Modesto as cashier on September 1.

Haidie Atkins, Mabel Reames, Pauline Toops, Wilma McDonald, Nettie Beauregard, and Gertrude Evans have been added to the local operating force at Stockton.

It looks as though Dan Cupid is favoring Stockton office again, as Marian Randall is now Mrs. Moore and Miss Veda Von Lengen has changed her name to Rendoldt. W. F. McDonald, formerly exchange engineer at Fresno, has been transferred to Stockton as district engineer, replacing H. P. Johnson who has been transferred to other duties.

W. R. Patton, supervisor of long lines, was a recent visitor in Sacramento. While in the Inland Division Mr. Patton took a run up to the sage brush country to give Winnemucca the "once-over."

During a recent visit to the Orland exchange, O. Cole, Jr., division superintendent of traffic, presented Mrs. Rovilla McNelay with a Service Emblem denoting five years' continuous service with the company.

A flood of matrimony seems to have hit our Sacramento toll office. During the last month the following employees were married: Leona Schreckengost, Irene Atwood, Anastasia Heisler, and Georgene Miller.

Stockton long-distance office was hostess at a surprise party in the form of a miscellaneous shower, in honor of Miss Julia McIntosh, Stockton local operator, who just recently married James Wood. The happy couple are now honeymooning in Los Angeles.

Our reporter, on a still hunt for news, approached our local service observer, Mrs. Verna Hoffman, in the cafeteria at Sacramento, and asked her if she knew anything. Mrs. Hoffman's reply was that she would like to tell the world that she was reducing.

Basket-ball teams have been formed by the Capital Telephone Club of Sacramento and the Stockton Bell Club of Stockton and have entered teams in the commercial leagues in each of these cities. When the season is about over, these two teams will probably tangle for the championship in the Inland Division, at which time there should be a lot of fur flying.





T. N. Horton, traffic inspector in the office of General Superintendent of Traffic Corcoran in San Francisco, has recently been transferred to Sacramento and his appointment announced as division traffic supervisor for the Inland Division.

Foreman Snure of the construction department, who has been employed in the Inland Division for the last couple of years, has resigned to return to his old home in Monterey, where he is going in the chicken business—feathered variety.

Miss Golda Garner, Chico operator, has been elected district representative of the Employees' Plan of Representation committee, traffic department, to fill the vacancy created by the promotion of Mrs. Whiting to the position of evening chief operator at Capitol office, Sacramento.

On the evening of September 23 a dance was given by the members of the Chico Bell Club to the young ladies of the operating force and their friends. The clubrooms were beautifully decorated with wild grapes and willow branches. Refreshments were served at a late hour to thirty-five guests.

On September 16 the many friends of Frederick E. Milne, engineer, Inland Division, were agreeably surprised by the announcement of his wedding to Miss Pearl Weller Huffman of Louisville, Ky. After a short honeymoon in the bay cities, Mr. and Mrs. Milne are making their home in Sacramento.

A new 80-line switchboard will soon be installed in Live Oak Inn at Oakdale. The hotel will install thirty stations, a portion of them to be in the present building and the remainder in the new addition. This switchboard was on exhibition at the Oakdale Fair, where it attracted much attention.

The members of the Chico Bell Club are now making elaborate preparations for their annual duck stew, to be held in Chico on Saturday, November 18. If the expectations of the entertainment committee go through, this banquet should be even a greater success than the big party held last year.

Wild Bill Danel, ex-fighting dough boy and hero of Balleau Woods and now chief clerk to the plant chief at Sacramento, took a fatal step the other day when he and Miss Rose Kiernan were united in marriage. The practice the "old boy" received in the first line trenches should now stand him in good stead.

The following item appeared in the Willows Daily Journal, September 8: "A farewell surprise party was given by the operators of the telephone company Thursday night, at the home of Mrs. J. F. Janeson, in honor of Mrs. Marguerite Storz, who has been transferred to Santa Barbara, where her husband holds a responsible position with the state highway department. A most enjoyable evening was spent in playing games and there was a general good time, with an abundance of delicious refreshments served at the close of the evening's fun. As a parting gift Mrs. Storz was presented with a beautiful lavallière as a token of esteem from the operators of the local exchange. She has been in the employ of the

company for the last six years, and during the last two years has served in the capacity of night operator. She has been a faithful worker and has won the favor and friendship of her associates."

The toll operators at Lodi, Stockton, Fresno, and Sacramento were provided with more tools with which to work during the last month in the form of additional toll circuits. Stockton-Sacramento, Stockton-Lodi, Lodi-Thornton, and Sacramento-Fresno circuits were cut into service and are much appreciated by all concerned.

G. P. Du Bois, division traffic chief clerk, has been transferred from Sacramento to Fresno, where he will assist Mr. Hicks to maintain Fresno in the rank it now holds. All division office employees wish Mr. Du Bois success and are conjecturing as to how much longer he will eat his meals alone or darn his socks unassisted.

C. C. Aller, former wire chief at Marysville and later acting plant chief at Sacramento, and now a member of the chief engineer's office, was a recent visitor in the Inland Division with a party of friends. Some of the local sportsmen in the plant department joined the party and motored to the rice fields, where they enjoyed a successful duck hunt.

The operating employees at Sacramento who enjoyed so many picnics at McKinley Park during the summer months, have organized themselves into a club, which will meet weekly at the homes of the different members. The club is known as the R. O. L. T., which is short for Royal Order of Long Tongues. Although the name of the club would indicate that it was formed for but one purpose, we understand that sewing is a side line. The girls were entertained last week by Mrs. Ada Wulff.

H. E. Rutledge, district traffic superintendent at Stockton, became weary sometime last month and decided that carrying two hundred pounds around unassisted was not quite the most efficient manner of performing one's daily tasks. As a result of that decision, he is now buying gas and tires for a five-passenger automobile, and expects to add to its capacity in accordance with the increase in the size of his family. Inasmuch as that family has just recently reached a total of five, that sized automobile should be sure of a steady job for some time to come.

One of the Selma local papers, in announcing A. P. Leitch as the new manager at that point, explained that Mr. Leitch had been with the company previously for a period of three months. Mr. Leitch naturally demurred, as his experience had been three years with the company at Sacramento. The paper in making amends came out with the following explanation: "The to correct an error made in last week's issue. We announced that Mr. Leitch, manager of the telephone company at Selma, had been with the company three months. Mr. Leitch has been with the company at Sacramento for three years, instead of 1200 years as announced previously. - gladly corrects the clerical error." Mr. Leitch already has the matter up with the Benefit Fund Committee.





The following inquiry was sent to the Woodland Mail by a subscriber who signed only the initials "L. P." It was answered by the newspaper in the following appropriate manner:

E. G. D., The Mail Office:

DEAR SIR-I'm not a chronic grouch but the long time that I have to wait for central to answer the telephone certainly gets my angora. What is the matter with all the operators, in love or asleep?

DEAR L. P.: Did you ever go to buy some stuff down at the

grocery store, And find a lot of people who were buying stuff galore?

If so you had to wait awhile until they all were

through,
Before the clerk would come around to sell his
stuff to you.

Well that's the way it is when central makes you wait awhile, And so you'd better hide your grouch and try a

little smile— To wait until the folks ahead are waited on and

through, Then central will say "Number, please," and do the same for you.

She's working for a company who pays her for

her work,
It's they who watch her all the time, to see that
she don't shirk; some patience when you call upon the

So try some pa Because this world is not a place that's meant for you alone.

At 2 a. m. on September 16 a fire broke out in the Berd Block, adjoining our office in Redding. The building was occupied as a rooming-house. The cause of the fire has not been ascertained, although it is thought to have been caused by defective wiring. One span of 400-pair cable and one span of 50-pair cable were destroyed, putting out of service 679 local telephones. The toll lines which enter the building from another direction were not affected. The rooming-house was entirely destroyed, and for a time it was thought the entire block was doomed. A new \$12,000 Stutz fire engine, which had been ordered by the city some time before, had arrived the preceding afternoon, and, although it had not yet been accepted by the city, was placed in service. Had it not been for this there is but little probability that the fire could have been brought under control, as the water pressure was very low. During the fire it was necessary to run hose through our exchange building to get to the alley in the rear; but such cooperation exists between the fire department and our people that this was done without any resulting damage from water to our plant. The firemen are praised for the manner in which they fought a battle with the flames for two solid hours before they were able to control them. They took particular precaution to keep the water from inside our exchange, which would have done as much damage as the fire. The credit for this, no doubt, goes to Fred Mitchell, an ex-wire chief at Redding, who is an active member of the fire department. Ninety per cent of the subscriber lines were put out of service, due to a 400- and a 50-pair cable burning, which was about all the damage done to the plant. Sacramento was immediately notified and Cable Foreman H. R. Dixon and his helpers and necessary material were on their way to Redding at 5 a. m. to restore service. All service was restored at 10 a. m. the following day, being only thirty-two hours from the start of the fire. Some speed! Miss Bonita Silvers, the

night operator on duty, was 100 per cent efficient in turning in the fire alarm and stood by the long distance until it was considered unsafe and she was told to leave. Wire Chief Williams and Combinationmen Sehorn and Scott had everything in readiness to cut the toll lines straight through to keep the carrier systems working in case the exchange burned.

L. L. Harrington, installation foreman of Sacramento, gave a very interesting talk on "First Aid" and "The Safety Code" before the members of the Reno Bell Club on October 30. Mr. Harrington was one of the representatives of our company to the safety code conference in New York City, and has been making the rounds of the different clubs in this division, telling the boys about his trip East, the object accomplished, and the aims of the company in first aid and accident prevention work.

Miss Belle Muldoon, manager at Carson City, Nev., was married on October 8 to J. W. Greiner, local manager for the American Express Company. Miss Muldoon is a very popular young lady in Carson City, where she was born and educated. She has been manager there since the lines were taken over by the Bell Company. Miss Muldoon has made a host of friends by her courteous treatment of everybody, and her wellwishers consist not only of the members of the division force, but nearly every individual in the town of Carson City.

Through the courtesy of Charles Wall, supervisor of long lines, a trip was arranged through the Sacramento central office for Friday night. Promptly at 7:30 some eighteen members of the division office assembled around the desk of Mr. Wall. The trip was then started, Mr. Wall first taking the party into the exchange building. From instinct or force of habit, many dashed up the stairs leading to the lunchroom, to be called back by Mr. Wall, who first took his visitors to the schoolroom, where all were introduced into the intricacies of a switchboard by Mr. Miers, who explained the working principle of the switchboard. The visitors were then conducted to the operating room to see in actual practice the principles explained in the schoolroom. Mr. Wall then took the party into the switchboard room and from thence to the toll testroom, where he did his best to explain the mysteries of a phantom circuit, repeaters, etc. It might be added that for the majority it was altogether too deep, for it takes a mechanical mind to grasp the meaning of it all. The party was then conducted to the basement, where the cables enter the building. As a whole, it was a most instructive and interesting trip and the courtesy of Mr. Wall was very much appreciated by his visitors.

The Hint Courteous

"Physical culture, father, is perfectly lovely!" exclaimed an enthusiastic young miss just home from college. "Look! to develop the arms I grasp this rod in both hands and move it slowly from right to left."

"Well, well," replied dad admiringly. "What won't science discover next? Why, if that rod had straw on the other end, you'd be sweeping." -Dredged.





Coast Division



A Sky-Line View of San Francisco, Division Headquarters

Division Commercial Superintendent, J. W. GILKYSON.
Division Superintendent of Plant, H. McBirney.
Division Superintendent of Traffic, F. J. Reagan.

Miss Laura E. Barlow, junior operator, Salinas, has recently resigned to be married.

Miss Lillian Delmas, pay-station attendant, Vallejo, has resigned to be married.

Miss Rose Jordon, operator, Lakeside office, Oakland, has resigned to be married.

Mrs. Evelyn Fox, operator at Hollister, has recently been transferred to Palo Alto exchange.

Twenty additional answering jacks were installed in our San Juan exchange a short time ago.

Miss Adele K. Nelson, junior evening operator, Merritt office, Oakland, has resigned to be married.

J. D. Worthington, manager at Hollister, was a recent visitor in the division office, San Francisco.

Mrs. Grace M. Mirandette, operator, Pacific office, San Francisco, has been promoted to the position of supervisor.

Miss A. Laura Pickle, traveling chief operator of Los Angeles, was a recent visitor to our Mill Valley exchange.

A No. 2 ten-station intercommunicating system has been started for the remodeled Exchange Bank in Santa Rosa.

Miss Evelyn G. Fernan, operator, Lakeside office, Oakland, has been promoted to the position of evening supervisor.

Miss Louise J. LePiniec, operator, Fillmore office, San Francisco, has been promoted to the position of supervisor.

S. Kellar, district traffic superintendent, and D. R. Blanchard, district traffic chief, visited our Martinez office recently.

Mrs. Lydia Byrnes, supervisor, Franklin office, San Francisco, has been appointed to the position of central office clerk.

Miss Alice E. Chapman, supervisor, Pacific office, San Francisco, has been appointed to the position of central office clerk. Miss Agatha A. Lomholdt, evening operator, Sutter Extension office, San Francisco, has been promoted to the position of supervisor.

Frances McAllen, long-distance operator, Martinez, was married to Harry Van Raam on September 8. Mrs. Van Raam remains with us.

Miss Annie G. Degnan, evening operator, Market office, San Francisco, has recently been promoted to the position of evening supervisor.

Upon completion of the Bertolani Apartments, Santa Rosa, within the next week, the installation of a sixteen station apartment house system will be started.

J. B. Reidy, switchboard repairman at San Jose, has been appointed correspondent for the Coast Carrier at San Jose, succeeding George A. Fairfield.

The Coast Division Mutual Insurance Organization is gaining members very rapidly in this district, the employees realizing the benefit of such insurance.

Engineering plans and specifications are being prepared to provide general underground and aërial cable relief in the San Jose exchange during 1923.

In order to provide additional facilities in the San Francisco Kearny office district, five 1212pair cables are to be placed from the Bush Street building over various routes during 1923.

D. C. Crawforth, construction foreman, Tacoma, Wash., was a visitor at the Napa exchange October 16. His account of work in the construction department of Washington was very interesting.

Palo Alto reports the taking of an order for a No. 2 P. B. X. intercommunicating system to be installed in the residence of Leon F. Douglas at Menlo Park, consisting of two trunks and eight stations.

E. E. Perkins, superintendent of maintenance, Oakland district, in company with A. E. Nash, district plant chief, made an extensive inspection tour of the San Jose district the latter part of October.





An enjoyable luncheon was tendered M. M. Smith, of the office of the division traffic engineer, Coast Division, at the St. Francis grill on October 28. Mr. Smith has been appointed division traffic engineer, Inland Division, and is leaving on November 1 to take up his new duties in Sacramento. Among those present were: R. E. Wolfe, traffic engineer; H. M. Prescott, general toll supervisor; E. C. Kloppenberg, toll traffic facilities engineer; E. C. Gee, division traffic engineer; and others who have been closely associated with Mr. Smith in his work in San Francisco.

Manager McGill of Palo Alto tells us that the plans for the new \$200,000 hotel for Palo Alto are progressing, and it is hoped that in the near future actual building operations will be started. The site selected is on Palm Drive just west of the highway on Stanford University property. The ground is now being cleared of trees and shrubs, and the underwriters of the stock of the company, who consist of sixty of the most prominent business and professional men of that city, are selling the stock at \$100 per share, and it is reported that their sales are progressing nicely.

A thousand years ago, and more, Men tore their hair and walked the floor And worried over this and that, And swore their woes would squash them flat. Where are those worried beings now? The bearded goat, the festive cow, Eat grass above their mouldering bones, And jay birds call in strident tones. And where the ills they worried o'er? Forgotten all. For evermore Gone. All the sorrow and the woe That lived a thousand years ago. The grief that makes you scream today, Like other griefs, will pass away. And when you've cashed your little string And jay birds o'er your bosom sing, The stranger coming there to view The marble works that cover you Will think upon the uselessness Of human worry and distress. So let the worry business slide, Live while you live . . . and when you've died The bunch will say around your bier, "He made a hit while he was here."

Mission and Valencia offices, in San Francisco, entertained with a very successful garden party on the evening of September 27. Dancing was enjoyed in the restroom, which was prettily decorated to suggest a garden. There were festoons of roses and ferns, intermingled with Japanese lanterns. The ceiling and walls were garlanded with wistaria and the room presented a most attractive appearance. The music was furnished by a live three-piece orchestra. Early in the evening the guests were presented with balloons, which furnished considerable excitement while they lasted. Another feature of entertainment was a number of vocal solos by the Misses White, Sullivan, Semple, Sheehan, and Jones. The climax of the evening was reached at the supper. Here the Mission and Valencia girls showed great originality in both the refreshments and decorations. The tables were artistically arranged with baskets of autumn flowers and hand-painted dolls, dressed in crêpe paper of pastel shades. Each guest received a doll as a favor. A delicious fresh crab salad with Saratoga chips, salted crackers, olives, pickles, home-made cakes, and coffee made up the menu. The members of the sewing committee wore aprons and maid's caps of crêpe paper of the same shade as the table decorations, and made a very pretty group. Judging from the number of favorable comments received from the guests, the committee of arrangements can consider that the party was a big success.

R. W. Miner, manager at Napa, reports the sale of one No. 2 intercommunicating system of two trunk lines and five stations to Doctors Bulson, Coleman, and Murray, the sale of a No. 550 private branch exchange, consisting of two trunk lines and five stations, to the Bank of Italy, Napa branch, and the completion of an order adding thirty-four stations to the private branch exchange at the St. Helena Sanitarium, St. Helena. The sanitarium's exchange now shows two trunk lines, with two to be added as soon as their part of the building is completed, and 123 stations connected on a 320-line private branch exchange switchboard.

F. A. Edwards, manager at Monterey, reports that the members of the Investment Bankers Association of America, who held their annual convention at Monterey from October 7 to October 12, filed 450 toll calls, of which 18 were transcontinental. In this connection the following letter has been received by F. A. Edwards, our manager at Monterey. "I want you to know that we appreciate the good service that you gave Hotel Del Monte during the time of the investment bankers' convention here. I appreciate your personal efforts in the matter, as well as those of your employees. The secretary of the bankers' association also asked me to thank you for what you had done. With best wishes to you, I am very truly yours, CARL S. STANLEY, Manager."

A special meeting of the Coast Division district representatives, traffic department, was called September 29 in San Francisco for the purpose of electing a division representative to fill the vacancy caused by the appointment of Miss Dreisbach of Oakland to the position of evening toll chief operator, Oakland. Miss Florence M. Wolcott of Oakland was elected to serve for the remainder of the term. Miss Tierny, division welfare supervisor, and her assistants, Miss Earl, Miss King, and Mrs. Reynolds, met the representatives and helped entertain them after the meeting. The following representatives were present: Miss L. B. Buzza and Miss H. E. Woods of the San Jose district; Miss C. V. Carey, Miss E. J. Nauer and Mrs. F. Kinman of the Santa Rosa district; Miss E. Moore, Miss M. Moore, Miss E. G. Stevens, and Miss F. M. Wolcott of the Oakland district; Miss R. B. Callaghan, Miss S. C. Dempsey, Miss N. A. Gaul, Miss E. Griffin, Miss L. I. Johnson, Miss M. F. Leahy, Mrs. K. A. McErlane, and Miss E. Stoddard of the San Francisco district.

"Obey the law. Even if you think the law not entirely wise, obey it while it is the law, reserving the right to use all proper means to amend it or end it."—Judge Gary.





Washington Division



A Sky-Line View of Seattle, Division Headquarters

Division Superintendent of Traffic, E. L. Breene. Division Commercial Superintendent, W. J. Phillips. Division Superintendent of Plant, H. J. Tinkham.

Miss Della Hickman, formerly a Highland operator, Spokane, was transferred to Riverside office on October 11.

Miss Isabel Bassett is the new clerk in the sales department, Tacoma, filling the vacancy left by Mrs. Wise, née Nina K. Moore.

Miss Sue Coates is greatly missed at the Main office, Spokane. She is on a three weeks' vacation and is enjoying a trip to Chicago.

Miss Marjorie McDuffie was appointed Central office clerk, Spokane, to relieve Mrs. Della De-Long, who has been transferred to Portland.

Miss Kathryn Loehner was recently promoted to the position of evening supervisor at Main office, Spokane, succeeding Miss Jessie McMahon.

The evening girls of the long-distance office, Tacoma, gave a miscellaneous shower for Irene Moore, who recently resigned. A very enjoyable evening was spent by all.

Cupid has been busy this month in Aberdeen, and the following changes have been made: Miss K. Strode is now known as Mrs. W. Backer and Miss M. Hay as Mrs. Snipe.

On the evening of October 14 the district revenue accountant's staff of employees held a very enjoyable dance in the assembly hall of our new Telephone Building in Seattle.

Donald MacLennan, cashier at Spokane, was on vacation October 10 to 23, inclusive, during which time we understand he harvested a large crop of fine apples from his orchard in Pasadena Park.

Miss Vashti Moore, evening chief operator of long-distance office, Tacoma, has been transferred to Los Angeles. She was succeeded by Miss Agnes Hansen, night chief operator, who in turn was succeeded by Miss Elsie Storaasli.

On the evening of October 11, the girls of Proctor office, Tacoma, gave a miscellaneous shower for Mrs. Neal Ryker, formerly Miss Lillian Gregory. A jolly good time was had by all those present. Her new home is to be in Portland, Ore.

Carl L. Jolly, who has been chief clerk to the division transmission engineer, has been transferred to the commercial department at Seattle and is now acting as a counterman.

The division commercial staff enjoyed in October the cordial visit of all Washington Division supervisory managers who were called to Seattle for the purpose of a two days' conference.

While on a short trip to Seattle, Miss Ella Litzer, an employee in our Portland business office, paid a pleasant surprise visit to former associates among the division commercial staff.

Mrs. Jeanette Loveleigh, chief operator, Oroville, Wash., has resigned her position and is leaving the city to reside in Spokane. Miss Ida Teel is the new chief operator.

While in Seattle recently, George H. Halse, president and general manager of the British Columbia Telephone Company, called on Division Commercial Superintendent Phillips to discuss affairs of general interest.

Miss Hazel Bready was a short time ago transferred from Beacon office, Seattle, and promoted to the position of supervisor at Rainier office, replacing Miss Millie Weeks, transferred to a like position at Garfield office.

Miss May Duplanty is back on the job at Capitol office, Seattle, after a serious and protracted illness. Miss Duplanty has innumerable friends throughout the Seattle exchange who rejoice at learning of her recovery.

The division commercial staff and other employees will miss the pleasing personality of H. K. Taylor, who has returned to our San Francisco general office, after spending several weeks in Seattle in connection with the state-wide rate case.

The Misses Merle Corn, Olga Krogh, and Edna Thorington appeared on the evening of October 19, 20, and 21, at the Legion Theater of Walla Walla in "The A. M. Jensen Fall Style Show." These young ladies are all members of our Walla Walla operating force.





Miss Irma L. Hookom, who has been manager at Wilbur for the last two years, resigned on October 3 because of the removal of her parents to Independence, Ore., and was succeeded by Miss Nettie Mason, who was previously employed as an operator at Wlibur.

Earl E. Mower, division traffic supervisor for several years in Seattle, died on October 9. He was well known in Spokane, where he entered the service of the company in 1911, and also in Tacoma, where much of his experience in telephone work was gained.

On September 21 a surprise party was given by the long-distance girls, Tacoma, at the new home of Mrs. Fannie Henkel, who was recently married. The evening was spent in playing games, prizes being awarded to the winners. At a late hour all were served with cake and ice cream.

The extensive operations of the Long Bell Lumber Company in the vicinity of Kelso are causing such a growth at that point as to tax the capacity of the exchange operated by our connecting company. The town is growing, property values are mounting skyward, and a regulation boom is on.

R. S. Reaney, who was formerly connected with this company as manager at Everett and at other locations in the Northwest, has again accepted a position with our company at Seattle. The many friends of Mr. Reaney among our employees will be glad to know that he is back with us again.

The Main office, Spokane, girls should be heartily thanked for the wonderful coöperation they have shown during the summer months by bringing beautiful flowers from their gardens each day to be distributed by the welfare supervisor on all calls made to the girls that are ill.

Miss Alice Murphy, supervisor at East office, Seattle, has resumed her duties in the "B" division after an extended trip through California. Miss Murphy states that the green hills of Washington were a welcome sight after a sojourn among the parched and brown hills of California.

C. W. Vail, for several years our agent at Carlton, Ore., has purchased the interest of the Henricksens of Washougal in the Camas Telephone and Telegraph Company, and will operate the exchanges at Camas and Washougal. Mr. Vail contemplates extensive improvements in the system of our connecting company.

Miss Olga Larson, stenographer in the commercial department at Tacoma, returned from her vacation on October 16. Miss Larson left Tacoma on the steamship Ruth Alexander on September 16 and visited in Los Angeles, San Diego, and other Southern California points. She reports a very enjoyable time, but says she is glad to be back home and at work again.

A very enjoyable dancing party was given Saturday evening, October 14, at the new home of Mrs. Clare DeMuth, who resigned recently from the long-distance office, Tacoma, on account of her marriage. About thirty girls and their friends were present. Several piano selections were given by Miss Juanita Quirk and solos by Miss Josephine Elsham and the Misses Strand. A buffet luncheon was served, consisting of sandwiches, pumpkin pie, and coffee.

Miss Hildegard Runge is "back home." After assisting in East, Capitol, and Garfield offices as relief supervisor, Miss Runge has returned to her old haunt, Beacon office, Seattle. Miss Runge is glad to be back with her former friends, and the Beacon girls were likewise gratified to have her return.

The Maxwell office, Spokane, girls received a pleasant surprise recently when Miss Ruth Mielke, evening chief operator, announced her marriage on August 15 to Edward Shea. A parfy was given for Mrs. Shea by her associates and a good time was enjoyed by all. Her many friends join in wishing her a happy future.

During the early part of the month, H. D. Pillsbury, vice president and general attorney; James T. Shaw, assistant vice president; N. Wigton, rate engineer; and C. E. Fleager of the chief engineer's staff, all from our San Francisco general office, visited local officials for several days for the purpose of conferring on important matters which required attention.

Because of the increased work in the directory advertising department at Spokane, Joseph J. Markowitz was transferred to that department from the collection department on October 16, Stanley Murray, coin box collector, assuming the position formerly held by Mr. Markowitz, and Frank K. Leigh being employed to succeed Mr. Murray as coin box collector.

Miss Irene Ware, operator at Walla Walla for a number of years, was married at Dayton, Wash., on October 3 to Ralph Taylor, who is associated with the Holt Manufacturing Company of Walla Walla. The wedding came as a complete surprise to their many friends, both in and out of the telephone business. All employees extend hearty congratulations to the happy couple.

Tacoma's second annual electrical show opened its doors to the public at 10 o'clock on September 19. It was held at the large building of the Veneer Products Company, at 1549 Dock Street. This building contains 40,000 square feet of floor space. It contained fifteen more exhibits this year than last. The Tacoma electrical houses placed on exhibition the multitude of appliances that make possible the application to every-day uses of that marvelous power that is rapidly revolutionizing the earth-electricity. Friday. during the twenty minutes between 7:35 and 7:55 p. m., 1000 people entered the building. attendance Saturday evening was 7787, and the total for the week was 30,000. The picture in this issue shows The Pacific Telephone and Telegraph Company's booth, located on the south side of the building, occupying a space 12 by 30 feet, which was trimmed in the company's colors. The manhole which was constructed in the center of the exhibit contained a 600- and a 1200-pair cable, the latter being used to demonstrate to the public how a splice is made. C. M. Cole, who did the work, attracted the attention of thousands of people during the exhibition. Another feature of the exhibit that drew considerable attention was the boards on which were mounted the component parts of a desk telephone. Last but not least was the pole lead, which was constructed with 16-pin crossarms fully equipped. were thousands of questions asked by old and





young and many favorable comments passed, also letters received commending us on the instructiveness of our exhibit. It was considered by a great number of people the best exhibit in the exposition.

There has been quite a change made in the chief operator forces in the Spokane exchange recently. Mrs. Julia Watkinson resigned to make her home in Portland. She is succeeded by Mrs. Martha Smith. Mrs. Smith was succeeded by Mrs. Edith Hansen, and Miss Mary Kennedy is the new chief operator at the Glenwood office. Farewell parties were given for the above mentioned chief operators.

Although protected by a high parapet in the tellers' cage at Spokane, one of Dan Cupid's darts penetrated the defenses, with the result that on October 14 Miss Gladys Terwilliger, teller at Spokane, became the bride of George Gehring. Mrs. Gehring tendered her resignation, effective September 22, and the young couple will be at home after November 1 in Portland, Ore., where Mr. Gehring is employed by Lynch Brothers. A very pretty set of silverware was presented to Mrs. Gehring by the commercial employees.

The former Camp Lewis operators held their first reunion October 12 at the home of Miss Jeanette Blackard, Tacoma. Those present were Edla and Loraine Wingard, Ossie McHindley, Agnes Hansen, Pauline Mast, Jewel Felt, Harriet Ruffs, Mary Hallem, Bernice Hiett, Josephine Elsham, Ruth Fields, Wilda Lane, Laura Burns, Jeanette Blackard. The reunion was planned hurriedly on account of one of the girls having to leave the city, so the committee was, therefore, unable to reach all of the former girls who live in the near-by cities. The evening was spent in talking over the old times at the camp, this being the first time some of the girls had met since they left camp. One feature of interest for the refreshments was a large cake with "Camp Lewis, 1917-1921" on it, which dates covered the period from the time the first operators went out to camp until the last ones left.

An event of special interest to the people of the entire Northwest was the formal dedication and opening of the new steel bridge across the Columbia River between Kennewick and Pasco, October 21. This new bridge is 3300 feet in length, including the approaches, and costs approximately \$450,000. This bridge is unique in that the money necessary for its construction was raised entirely by private subscription. This is the only bridge over a major stream in the United States financed by private capital. Prior to the completion of this new bridge, those traveling by wagon or automobile along the Yellowstone Trail, which connects the eastern and the western parts of the State of Washington, had to depend upon a small ferryboat for crossing the Columbia River at Pasco. The new bridge will make traveling between the Puget Sound country and the eastern and southeastern parts of the State of Washington much more convenient and will bind these sections of the state into a closer business and social relationship. On account of the fact that the new bridge is of state-wide interest, nearly all of the larger cities and towns in the State of Washington had delegations present to take part in the opening ceremonies. The dedication was

made by the Lieutenant Governor of the state, W. J. Coyle. Manager C. O. Myers of Seattle, accompanied the delegation from the Seattle Chamber of Commerce to Pasco and Kennewick, to take part in the formal opening ceremonies in connection with the opening of the new steel bridge.

George A. Walker, manager at Spokane, made an inspection trip to the exchanges at Wilbur, Govan, Almira, Pateros, Okanogan, Omak, Riverside, and Oroville; also of the connecting company exchanges at Reardan, Davenport, Creston, Waterville, Chelan, Bridgeport, Brewster, Mallott, Twisp, and Tonasket, during the latter part of October, making the trip by auto in company with H. A. Stimmel, acting district plant engineer.

Garfield office, Seattle, pulled off another party! This one fully maintained the usual standard of excellence for Garfield parties. Misses Schroeder, Roemig, and Powers were in charge of arrangements, which did them proud. Tasteful decorations, attractive games, in which every one joined, music, dancing, and a bountiful supply of good eats all combined to make the evening most enjoyable. Oh, yes, Miss Stewart, Garfield chief operator, "did" California, but, to hear Miss Stewart tell it, one also learns that California "did" Miss Stewart. Miss Stewart returned to the Queen Anne hilltop full of renewed pep and vigor, and a fund of stories of the state of sunshine, movie actors, and warm atmosphere.

The following letter was received by Manager John Schlarb, at Tacoma, a few days after the recent Tacoma Electrical Show had taken place: "I spent such a long time at your display booth at the Electrical Show and secured so much benefit from it that I feel that I must make some slight return for same. Judging by myself, I don't believe the public knows, or realizes, rather, how much has to be done, and the expenses incurred, before we can get our phones installed. Your salesman was courteous about answering my many questions-and they were numerous, I assure you-and if it were for your display alone the Electric Show was well worth attending. Our phone has been in twenty-five years or more, but we never knew how much had to be done before we could say 'hello.' Mrs. JAMES KENNEDY."

At the request of Mrs. Clare Ketchum Tripp, educational director of the Washington Industries Bureau, the educational demonstration, "Your Telephone Service-How Rendered," which was described in the October MAGAZINE, was presented before the members of the Washington Educational Association at their convention in Spokane on September 27. Advantage was taken of the fact that the equipment was in Spokane, and the demonstration was also given before the assembled students of both the Lewis and Clark and North Central high schools, before the Kiwanis Club, and in the school auditorium at Opportunity, Wash., in addition to the Auditorium Theater, where the program was given at 2 p. m., 3 p. m., 8 p. m., and 9 p. m., October 3 and 4. At least 1500 of the educators of the state saw the demonstration before the Educational Association, and a total of 7660 persons saw it in Spokane. An employees' orchestra of eleven pieces was organized specially for the demonstration





by E. F. Pavy, chief salesman, Spokane, the orchestra consisting of the following employees: John Adams, violin; Mrs. C. G. Walsh, violin; Miss Winnette Watson, violin; Miss Marjorie McDuffle, piano; C. G. Walsh, saxophone; John Brown, clarinet; Ben Rogers, drums; Miss Mc-Donnell, cornet; A. L. Avery, cornet; C. A. Smith, trombone; and Miss Pearl Gibson, violin. The commercial talk was given by B. H. Callison of the commercial department, Spokane; the plant talk by George R. Bennett of the plant department, Spokane; and three members of the Spokane traffic force assisted in the traffic demonstration, Miss Opal Downing, Miss Thelma Mickle, and Miss Glenna Jeannot, the other parts being taken by Miss P. Newell, Miss M. Stevens, Miss J. O'Neill, Miss E. J. Naujok, and Miss A. Stark of Seattle. As a measure of the value of the demonstration in Spokane, editorials which appeared on October 6 in the two leading Spokane papers, the Spokesman-Review and the Spokane Chronicle, are quoted below:

"MAN WHO GROWLED AT 'CENTRAL' MIGHT HAVE LEARNED A LITTLE

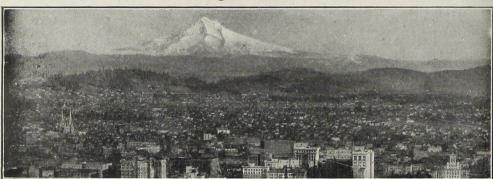
"It would have benefited every one of Spokane's thousands of telephone users to have seen the public demonstrations conducted here during the last two weeks, setting forth the difficulties under which phone exchanges are operated. The exhibitions proved that almost all the flaws in service that arouse the ire of impatient subscribers are due to the fact that machinery is not perfect or that operators are not mindreaders. Part of

the unsatisfactory service is to be charged to subscribers themselves, who do not take the trouble to follow instructions in using the tele-

trouble to follow instructions in using the telephone. As a public service institution, the telephone system is a thing with which every citizen should be more familiar."—Chronicle.

"The Home Telephone Company renders a public service of much use to the community when it shows the workings of the mechanism through which calls are handled at the central exchange. Two hundred thousand calls on the service are made daily, and its customers err 2000 times a day in sending these 200,000 calls. There obviously is need of an educative demonstration. The purpose of the exhibitors is to enlighten and inform their customers concerning the operations form their customers concerning the operations performed at central when it receives the tele-phone call, and makes the desired connection with performed at central when it receives the telephone call, and makes the desired connection with the person with whom communication is sought. It is desirable that the customer calling for a connection should realize that the responsibility for an errant call rests with him. Without our knowing how central does its part in connecting the calls, we should fail to appreciate the real excellence of its service. One has to go abroad to comprehend the superiority of telephone service in the United States over such service in Europe. At London, for instance, it is easier and quicker to call personally on a person than to call him through the telephone. Such work as this of the Home Telephone Company in showing its ways of work means a new attitude on the part of public utilities. Formerly they took the customer's money and rendered only such service as they could. But their ideal and aim of efficiency have caused a new departure. The maximum of efficiency in service has expanded to include enabling the customer himself to increase efficiency. This is effected by educating him as to the ways the company does its work and the way in which the customer can coöperate with it."—Spokesman-Review.

Oregon Division



A Sky-Line View of Portland, Division Headquarters

Division Superintendent of Traffic, C. B. Allsopp. Division Commercial Superintendent, C. E. HICKMAN. Division Superintendent of Plant, CARL WHITMORE.

Miss Mina Womack was recently engaged as an operator at Echo.

Miss Mary Watson was employed in October as an operator at Baker.

Miss Lucile Marquis was recently employed as an operator at La Grande.

Mrs. Ruth Hill has been added to our operating force at Hood River.

Misses Anna McCully and Manda Wilson are new operating employees at The Dalles.

Frances Searle, operator in our Broadway office, Portland, has been transferred to Hoquiam, Wash.

Maude Dillon, night operator, Broadway office, Portland, was recently transferred from East office.

Salem is glad to welcome back to the operating force Mrs. Susie Feller, formerly Miss Susie

Miss Ruth Pardue, who was formerly employed at Klamath Falls, has recently been added to our Eugene force.

Miss Grace Umphlette of the Portland longdistance office, spent her vacation at Tillamook, Ore., where she was formerly employed as an operator.

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Lillian Dobson, night operator, Broadway office, Portland, has been transferred to Corvallis, Ore.

Miss Helen Jones, operator at Tabor office, Portland, has accepted the position of evening supervisor in that office.

Miss E. Soule, chief operator's clerk at Tabor, Portland, recently returned from her vacation, which she spent in Chicago.

The Misses E. Shapland, A. Foust, H. Erickson, and H. Altermatt were recent additions to our operating force at Tabor office, Portland.

Mrs. Beatrice Welch, née Haverson, local operator, Salem, has recently resigned to keep house in Portland for a newly acquired husband.

Miss Ida Monterstella has been transferred from Oakland, Cal., to Pendleton. Miss Monterstella was formerly an operator at Pendleton.

Dorothy Milliken and Mabel Thorsness, operators, Broadway office, Portland, have recently been promoted to the positions of evening supervisor in the same office.

The following employees have recently been added to the operating force at Salem: Ada York, Marian Conner, Myrtle Chambers, Dorothy Chambers, Helen Jones, Marjorie Tucker, and Flayvella Haynes.

On September 14 a miscellaneous shower was given Ruth Rees, better known as Seybold, operator, Broadway office, Portland. A delightful evening was spent in singing and, as usual, "gossipping." A dainty luncheon followed.

Cupid has been busy at Sellwood office, Portland, this last month. Two of the best-known girls of the office were married: Mrs. Frances Gage, supervisor, and Miss Eda Schilb, evening chief operator. Both girls intend to continue in the service.

On the evening of October 11 the newly organized telephone club, known as the B. B. O. Club, held its monthly meeting in the operators' restroom at Eugene. At this meeting six new members were initiated. At the close of the evening Mrs. Doty and Mrs. Reynolds served a delicious luncheon.

At the home of Mrs. Mabel Brockley, evening chief operator, Roseburg, a surprise shower was recently given in honor of Miss Violet Moffitt, operator, whose engagement to John L. Saunders of that city has been announced. All the operators who were not on duty enjoyed the evening with music and games.

The Salem traffic employees were glad to have as their guests at the regular September meeting the members of the Eugene district committee, Miss Grace Platt of Eugene and Mrs. Maude Hansard of Albany. After an interesting meeting the committee members were entertained at the State Fair by Miss Hastings, Salem representative.

Miss Josephine McDonald, chief operator at Tabor office, Portland, and Mrs. Julia Johnson, evening chief operator, were recently transferred to Main office and will hold the same positions, respectively, there. Mrs. Frances Brace, from Broadway, took Miss McDonald's place and Miss Florence Smith is the new evening chief operator.

A birthday party was given Harney Barclay, switchboard clerk, and Myra Jones, supervisor, Broadway office, Portland, October 10, at the beautiful home of Leona Clark, switchboard clerk, also of the same office. A very enjoyable evening was spent in singing and dancing. Luncheon followed. Two beautiful white cakes adorned the table.

Miss Anna Rich of the division traffic office, Portland, gave a party in the form of a miscellaneous shower September 27 in honor of Miss Agnes Orr, chief operator's clerk, Broadway office, Portland. The house was tastefully decorated with beautiful zenias. "Little Virginia," Miss Rich's niece, entertained by dancing. A dainty luncheon was served. The table was a shower of pink ribbon tied to small bride place cards.

The birthday of the Salem evening chief operator, Miss Daisy Varley, was the motive for a very happy party held at the home of Mrs. Johnson, long-distance supervisor. The party was also in the nature of a house warming, as the Johnsons have just moved into their lovely new bungalow. Dancing and music furnished entertainment for the guests. The girls say the new floor "slipped" fine and the player piano didn't get a bit tired.

On the evening of September 22, Mrs. Edith Claxton, long-distance operator, Salem, entertained at her home with a miscellaneous shower in honor of Miss Hannah Hastings, bride-elect. The girls turned out in force. Numbered among Mrs. Claxton's guests were Mrs. Margaret Rush, Mrs. Susie Feller, Mrs. Lena Victor, and Mrs. Ruby Mull, all former operators; Miss Jorgenson, Miss Woodworth, Miss Mary Jacobs, district office clerk, Eugene, and C. A. Wyman, district traffic superintendent.

A number of very delightful affairs have been given for Miss Florence Allen, bride-elect, Main office supervisor, Portland, among which was a dancing party given at Main office on September 14. The rooms were attractively decorated with early autumn blossoms. A short musical program was arranged by Miss Margaret Mann, as follows: Piano selections by H. E. Kelly and Miss Marguerite Boggess; solo by Axel Landeen, accompanied by Miss Minnie Pomeroy; solo by Miss Margaret Gibson, accompanied by H. E. Kelly. The dance was followed by a buffet supper, which was served by the young women of Main office. About sixty guests were present.

What is said to be the largest submarine cable ever brought west of the Mississippi River has just been laid across the Willamette River by our company in order to connect its east and west service in Portland. The installation of the extra sized under-water carrier was made necessary by the rearrangement of our Portland offices, including the addition of the Garfield and Beacon offices, which will be made simultaneously with the cutover to the new six-digit method of operation. The cable was laid by the company's barge Joseph H. Thatcher, a total of 1400 feet, costing approximately \$4000, being required to reach across the bottom of the river. While this cable is only three and one-half inches in diameter, it carries 910 wires, or 455 pairs, about 12 per cent more than any other submarine cable in use in this





district. Each wire within the cable is wrapped with individual windings of paraffine paper, the whole mass then being covered with a lead sheath, a layer of jute and, finally, with a spiral wrapping of thirty-six galvanized steel wires. The entire weight of the cable is about seven tons, or approximately ten pounds to the foot.

At noon on September 25, Miss Margaret Shaw, who has been employed in the Eugene office for the last two years, became the bride of Lester Campbell of Portland. Reverend E. V. Stivers read the ring ceremony in the presence of the immediate family and a few intimate friends. The bride wore a navy-blue suit and carried a bouquet of pink and white carnations. Following the wedding dinner, Mr. and Mrs. Campbell left for Portland, where they will make their future home. The entire Eugene force wish both the bride and groom much happiness.

OREGON'S SERVICE
With courtesy our motto
And accuracy our aim,
Our service throughout Oregon
You'll find is much the same.
There are many kinds of service
To be found the whole world through,
But the very best of service
Is the kind we offer you.
You'll meet with any kind of service
Just the same as any style
But the kind you get in Oregon
Is "service with a smile."

-Hilda Berkey, Salem.

On the evening of October 7, at the Christian Church in Salem, Miss Hannah Hastings became the bride of Walter Goughnour of Salem. Miss Hastings has been employed as information operator in the Salem exchange for the last four years and is a member of the Eugene district committee under the Employees' Plan of Representation. She has many friends throughout the Eugene district who will wish her happiness in her newest venture. Mr. Goughnour is a popular and successful business man of Salem. After a two weeks' honeymoon in the mountains near Swiss Home, the Goughnours will return to Salem to make their home in this city. Mrs. Goughnour will continue her position with the company. The Salem operators are all sleeping with wedding cake under their pillows and the "Dream Book" is being consulted freely.

One of our correspondents, whose range of reading covers a wide area, has sent us this clipping from the American Mutual Magazine, entitled "The Boss": "You may think the Boss is pretty near all-powerful. But he isn't. He's as helpless in the hands of Time and Events as you are. Especially is he helpless as to you. Don't think that the Boss can make you or break you. He can't. He can not keep a poor man up or a good man down. He can pile titles and salary on top of a man, but if the man is weak the result will be only a grease spot. On the other hand, the Boss may drape overalls and a ten-a-week salary around a fellow, and put him at work cleaning cuspidors, but if the chap has brains he will get the Old Man's job sooner or later, or some other job just as good. The thing for the worker to do is to work to satisfy not the Boss but himself. Let him ask himself each night, 'Have I

delivered the goods today? How do I stack up? Have I accomplished anything? Is the cause in which I am engaged any further ahead by reason of my thought or effort? Have I earned my salt today, and a little more?"

The Corvallis Daily Gazette Times of October 3 carried this interesting story regarding our manager in that city, J. C. Lowe: "At last night's meeting of the city council, the resignation of City Treasurer Strange was accepted, to take effect when the books are audited and found satisfactory, and former mayor J. C. Lowe was named to fill the vacancy. Mr. Strange's resignation came as a result of the growing activities of the city water department, of which he is superintendent. He has been wanting to resign for some time, but stayed with the job purely as a service to the city, the pay being but \$25 a Recently the Water Commission urged him to give up the work, and Mr. Strange finally insisted that the council relieve him. In naming Mr. Lowe, the officials hit upon a man who is almost a professional treasurer. Besides being a Shriner, he is a member of the Masonic Blue Lodge and its treasurer, and a leader in Elkdom and treasurer of that order. Mr. Lowe has been head of the 'phone company in Corvallis since 1904, and, of course, the local treasurer. He knows what treasuring is, and having been Mayor of the city is thoroughly familiar with the method of handling city funds. As chieftain of the Pacific States Telephone and Telegraph Company, now starting to spend \$125,000 in a new home and in improving its system, Mr. Lowe will have after January 1 a downstairs office on Third street in a most acceptable part of the business district. Mr. Lowe is too well known in this community to need further introduction. He is chairman of the County Red Cross, always one of the leaders in every sort of public activity, but above all things else is distinctly a business man, thorough and capable, when it comes to handling business matters. He will make an excellent treasurer, and it is to his interest in public affairs and the desire of his company to cooperate, that brings his acceptance.

The Bridge Builder

An old man, traveling a lone highway, Came at the evening, cold and gray, To a chasm vast and deep and wide.

The old man crossed in the twilight dim,
The sullen stream had no fear for him;
But he turned when safe on the other side
And built a bridge to span the tide.

"Old man," said a fellow pilgrim near,
"You are wasting your strength with building
here;

Your journey will end with the ending day,
You never again will pass this way;
You've crossed the chasm deep and wide;
Why build you this bridge at eventide?"
The builder lifted his old gray head—
"Good friend, in the path I have come," he said,
"There followeth after me today
A youth whose feet must pass this way.
This chasm that has been as naught to me
To that fair-haired youth may a pitfall be;
He too must cross in the twilight dim—
Good friend, I am building this bridge for him!"
—Selected.





Southern Division



A Sky-Line View of Los Angeles, Division Headquarters

Division Superintendent of Plant, I. F. Dix, Division Commercial Superintendent, N. R. Powley, Division Superintendent of Traffic, F. N. Rush.

Mrs. Esther Rowan has returned to the Colorado office, Pasadena, as operator.

Fullerton is to have a new hotel, which it is expected will be ready for business in sixty days.

Miss Mildred Taylor, stenographer in the Los Angeles business office, has recently resigned to return to her home in Dallas, Texas.

Miss Ora Smith, sales clerk, San Diego, has just returned from a two weeks' auto trip through the northern part of California.

Gladys Laver, Maudeline M. Gifford, Edith E. O'Brien, and Mildred Daiber have been added as evening operators, Colorado office, Pasadena.

Miss Gwendolin M. Cheetham, operator, Vermont office, Los Angeles, has left to join her parents in Aberystwyth, England. Très bon voyage!

A 30-line switchboard was installed during the last month for the G. H. Becker Company, San Diego, with two trunks and fourteen stations.

G. A. Wood, office manager, Los Angeles exchange, has again resumed his duties, after an absence of two weeks, following an operation for tonsilitis.

Lincoln office, Los Angeles, has the following brides this month: Miss Laura Morris, now Mrs. Forgeron; Miss Ramona E. Paradis, now Mrs. Reisner; Miss Lillian E. Schultz, now Mrs. Berger.

Miss Lillian Salquist, Colorado supervisor, Pasadena, recently left for the East. After a few months' rest she is going to work in one of the offices there. A photograph album was given to her with pictures of the operators in it.

Once more Escondido has acquitted herself with honor, in the annual observance of "Grape Day," September 9. The town was gaily decorated for the occasion, and one of the largest crowds that ever gathered in the Sun-Kist Valley was kept in happy mood from the time of crowning the "queen" until the wee hours of the morning. The most important feature of the day was the usual free distribution of an almost unlimited quantity of luscious Muscat grapes.

Miss Nora Doherty, operator, who has won our hearts and respect with her sweetness and ability, has resigned from Vermont office, Los Angeles. We are sure that you will be most successful, Nora, and sincerely wish you success and happiness.

The Big Idea exhibition recently was shown before the Anaheim Rotary Club, of which meeting our Anaheim manager, E. A. Beard, was chairman. It was also given at the California Theater at Anaheim on the same date and at the county fair at Santa Ana, September 27 to 30, inclusive.

Mrs. Clarence M. Doland, formerly Miss Geraldine L. Ulery of Main office, Los Angeles, recently entertained in her new home. Among the guests were the Misses Myrtle C. Barton, Anita L. Figueras, Ethel J. Webber, Dazie B. Hilton, Eileen Irwin, Florence T. Rose, Fonda L. West, and Mildred D. Aiken.

The following changes in the personnel of the sales department, Los Angeles exchange, were effective September 21: W. H. Wiegelman, supervisor Wilshire unit, transferred to special assignment; W. Edwards, supervisor Garvanza unit, transferred to supervisor of Wilshire unit, succeeding Mr. Wiegelman; Garvanza unit was absorbed by the South unit and E. L. Bowen remained as supervisor.

If there are any doubts as to the growth of Fair Oaks office, Pasadena, these days, a glance over the list of operators added to the force since the last issue of our Magazine will quickly dispel such doubts. The new additions are the Misses Helen A. Kleps, Mollie T. Paul, Bertha B. Boswell, Blanche I. Ross, Clara O. Ross, Ruth A. Jackson, Freda L. Crowder, Frances E. Decker, Ruth P. Schwoerer, Mildred E. Carlton, Alice M. Wood, Marjorie I. Wood, Evelyn B. Cuthbertson, Dorothy Jannoch, Jessie Wilson, Cecilia D. Gavel, Gladys M. Markham, Hazel E. Mulford, Vera E. Smiley, Helen H. Critcher, Eleanor E. Dalzell, Mildred E. Barney, and Mrs. Marie D. Arthur, who was formerly monitor in Fair Oaks office, Pasadena, before her marriage.





At the Elks state convention recently held at Santa Monica, Miss Sadie H. Spats, evening operator at Santa Monica toll office, won second prize as the best groomed "Slinker" at a Slinker-Slanker contest held at the "Bon-Ton Dance Hall" at Ocean Park.

The following girls have been added to our Colorado force as junior evening operators: Mary G. Lorenzen, Marguerita A. Foth, Leona M. Norton, Violet I. Davis, Jewell A. Beem, Helen L. Webster, Edna V. Walter, Eron D. Lawrence, Unceta A. Stinson, Rhea Hall, Lessie L. Miles, Patricia E. Murray, Helen M. Boberick, and Eloise M. Brown.

Main office, Los Angeles, has eight new brides. Their friends will recognize them best as Miss Eulalia M. Fisk, Miss Mildred C. Caston, Miss Artie Heading, Miss Eleanore P. Kingsley, Miss Gabrielle Leibrock, and Miss Elizabeth Harney, operators, and Miss Irene E. Carroll and Miss Ethel J. Weber, supervisors. Also, it is rumored that Miss Eileen Irwin and Miss Buernadene C. Olsen are soon to be married.

The following changes became effective in the sales department, Los Angeles exchange, November 1: E. L. Bowen, supervisor, Sales Unit No. 3 (South unit), resigned. H. B. George, supervisor, Sales Unit No. 6 (counter unit) transferred to supervisor Sales Unit No. 3 (South unit), succeeding Mr. Bowen. C. F. Radford, senior clerk, Sales Unit No. 6 (counter unit), appointed acting supervisor Sales Unit No. 6, succeeding Mr. George. J. P. Ross, Jr., appointed acting senior clerk Sales Unit No. 6 (counter unit), succeeding C. F. Radford.

On September 4 to 9 the Alhambra Business Men's Association held a carnival in which our Alhambra manager, C. H. Reed, played an active part. A large and attractive float was entered in the parade held September 4. It is estimated that over 50,000 people attended the carnival, and very favorable comments were received in connection with our exhibits. Hardly an hour of the day passed that some one was not looking over the telephones and cable on display, and our float was considered one of the best and received much applause all along the line of march.

The wedding bells still ring merrily on . strains of the wedding march floating on the summer breeze at the home of Mr. and Mrs. Lacko on the evening of August 31 while their daughter, Madalyn M. Lawrence, took the "I will" vow with a brave heart to become the bride of LeRoy Hanson, formerly of San Francisco. Pink and white decorations throughout the house, with dainty pink butterflies floating here and there, completed by a background of ferns, added to the beauty of the supper table, where the guests ate and drank to the health of the bride and groom. The dainty little bride wore a creation of cream lace and periwinkle. The bridal bouquet of Cecil Brunner roses and maidenhair ferns fell into the hands of Miss Ruth Gundred, long-distance operator. From this we will say "another wedding soon." Many gifts were received during the days of the preceding week, many coming from relatives in the East, where distance alone made the trip impossible. A wonderful cutglass fruit bowl and a half dozen cut-glass goblets found their way to the gift table. The evening passed almost too quickly after the grand march, lead by the bride and groom, turned into a one step, and the intervening dances of fox trots and waltzes, ending with the familiar "Home, Sweet Home." To the bride and groom, "happiness always."

Following the usual custom of the managers' taking active part in local public activities, A. E. Scott, manager at San Diego, was one of the principal speakers at the club meeting of the Y. M. C. A. recently, the subject of talk being "Keeping Physically Fit." Mr. Scott also represented the Rotary Club at a luncheon given at the Y. M. C. A. recently, and gave a brief talk dealing with work of the organization.

A number of Santa Ana Rotarians took charge of the Fullerton Rotary Club meeting, held at the Elks' clubhouse at Anaheim on October 10. Our Santa Ana boys put on a clever sketch dealing with the strike problem in a modern manufacturing plant, and the fact that several Rotary clubs from other cities have asked to have it put on for them is proof of the hit the show made. Much credit is due to E. S. Morrow, our Orange County manager, for the success of the performance.

Miss Lola M. Flannigan, long-distance operator at San Diego, recently confided to our chief operator that a few days' absence from the office was necessary to change her name to Mrs. H. E. Kaplinger. They were quietly married at the parish house on August 24. Our Miss Flannigan no longer, but with the same happy smile and halo of auburn hair, known to us as "the golden girl," she returned to meet with a surprise from our force. So that the husband must not suffer from pangs of hunger, so he may leave with a smile each morning, Mrs. Kaplinger was the recipient of a wonderful percolator, the best we could find. We wish every happiness to the fair bride and her groom.

There is a mixed atmosphere of gloom and pleasure around the Pasadena exchange nowadays. The gloom is caused by the loss of H. R. Nash, district traffic superintendent, who will have charge of the Los Angeles suburban district, from which Pasadena has been separated. The pleasure is caused by the arrival of P. M. Grant, district traffic superintendent, from San Diego to take over the newly made Pasadena district. Mr. Nash has endeared himself to every employee, from those who work in daily contact with him to the newest operator who knows him by reputation only. They all realize that their problems and griefs are the problems and griefs of Mr. Nash and that he rejoices in their success. He stands in the hearts of all not only as an unusually splendid executive, a superior officer who gives the same enthusiasm and attention to detail that he demands from his employees, but a staunch friend, tried by the daily routine of business. The affection and best wishes of the Pasadena district go with Mr. Nash, and every one hopes that he will frequently come back to say "How do you do." To add to the general gloom, Miss A. Laura Pickle, traveling chief operator, remains with Mr. Nash in his district, and Miss Dorothy L. Adams, his clerk, also accompanies him in the rearangement of districts.





On the other hand, to offset the gloom, the Pasadena district has rapidly become very staunch supporters of Mr. Grant, and the opinion is unanimous that the reports preceding his arrival failed to do justice to his enthusiasm, efficiency, and personality. The Pasadena district welcomes Mr. Grant!

Around, around, and around Broadway office, Los Angeles, force danced. They were not dizzy nor was it an earthquake. It was a Hallowe'en dance. This was given at the operators' school, October 21, 1922, just a "homey" informal affair. The interior was decorated in yellow and black and the garden in the rear was prettily lighted. An added attraction was the gypsy fortune teller. Madam De Bunk had a small room decorated especially for her and, we understand, established quite a reputation for herself. Midnight came and every one was still present, so it was decided that we should request the orchestra to play "Home, Sweet Home." All were having such an enjoyable time they had forgotten they had a home.

At the fourth annual county fair recently held at San Diego, The Pacific Telephone and Telegraph Company's exhibit was crowded at all times with persons interested in the operation of the automatic exchange. Included in the exhibit was a complete working model of the automatic system, showing just how a call by automatic is received and how a connection is made for a subscriber. An automatic dialer was used, so that the model was in operation at all times during the entire five days of the fair. Models of the new automatic phones which are now being installed in San Diego were also on exhibition, together with other equipment of interest, the whole making up one of the most interesting and attractive displays of the entire

At San Diego on the afternoon of August 14, near the close of the working day in the longdistance office, we heard the clattering, rattling din of cowbells when, with an attractive sign, "just married," a more fully decorated auto drove frantically past the office. Seated on the throne of honor among the many shoes, old hats, paper ribbons, cowbells, and rice sat our Miss Henrietta Hale, just married and now the smiling and happy Mrs. J. Edward Kinnel. Weathering a schoolday courtship and the long absence of the weary World-War days, the happy pair were married at the home of the bride's sister. The rooms were attractively decorated in bridal roses and ferns. At the appointed hour the bride entered in a creation of turquoise blue, carrying a bouquet of bridal roses daintily held together with the lover's knot. During the absence of the honeymooners the long-distance girls arranged a luncheon and shower given at the home of our esteemed chief operator, Mrs. Ella Nelson. And right here it is safe to say that the said residence has nearly become a clubhouse for our force. Through the kindness and love we bear for our chief operator we have found in return a heart full of kindness and affection and open doors with "Welcome" on the mat to our many showers and get-together parties. At the close of the honeymoon, standing on the brink of a new life,

Mrs. J. Edward Kinnel returns to her office of duty as long-distance evening supervisor. Many kind thoughts to this loving pair and may their path be one of sunshine and happiness—they have our sincere and best wishes.

To teach the Los Angeles supervisors the new phrases, the company is sending one supervisor from each office to the operators' school. A two weeks' course is given which covers all of the new conditions and phrases. The first class was instructed by Miss Phillips, who made herself so popular with the girls that the day before "graduation" they gave a luncheon in her honor. Miss Sara Guderian of Main office tells the history of the class in the following poem:

To give us all more knowledge,
To teach us every rule,
The company sent us over
To the operators' school.

Vermont sent her very best,
Who wears a golden star—
We bow our heads to Kimberly,
May she keep things as they are.

And from Garvanza office
There came two maidens fair,
Price and Delvin were their names—
You'd like them anywhere.

Verner came from Wilshire, And to help us in the quiz She brought Chappell to tell us How to verify the "biz."

"Do it now," our motto says—
"While the sun shines make hay"—
A problem 'tis for most of us,
But Olive Hath-a-way.

From the center of the building, In the center of the town, They lost a ray of sunshine When Pico One sent Brown.

McKenzie and Clawitter—
They came from Pico Two,
Bobbed hair, dimples, winning ways,
And eyes of brown and blue.

Some folks won't do or say a thing Which will bring others good, It just confirmed what we all thought When Newell said "Holly-wood."

To thrash out every argument,
To learn the pro and con,
They found a willing worker
When Broadway chose Miss Hahn.

Weber says, "To get ahead Make your good and better—best." 'She has a way to reach the goal And shows them all out West.

As the sound comes from vocal chords
Up from the nose and mouth,
We hear a girlish giggle—
It's Wilson, from down South.

And now about Guderian
We haven't much to say,
But Main keeps doing business
Even though she is away.

At last we know the "Good Book"
How, when, and what to do,
Why do we hate to leave it all?
Miss Phillips, dear, 'tis you.





As an illustration that distance is no handicap in expressing appreciation for efficient and courteous treatment, we are pleased to acknowledge receipt of the following letter mailed from Osaka, Japan, to William Edwards, supervisor in the sales department of the Los Angeles exchange: "The Osaka Central Telegraph Office, Osaka, Japan, September 15, 1922. W. Edwards, Esq., Southern California Telephone Company, Los Angeles, Cal. DEAR SIR: I beg to tender my best thanks for your kind and courteous treatment accorded me either publicly or privately upon my recent visit to your city. Your valuable assistance and careful information regarding the subject of my inquiry, will have a large share in promoting the development of the telephone service in Japan, and will thus contribute greatly to the improvement of communications in general. I regret the tardiness of my expression of appreciation of all your courtesy and goodwill, but I must plead as my excuse the illness from which I have been suffering since my return home. I am glad, however, to inform you that I am getting better day by day. Thanking you again for all your kindness and soliciting a continuance of your favor, I am, Yours truly, S. J. YAGI, Director."

The following interesting and self-explanatory letter was written to Division Commercial Superintendent Powley by Carl D. Rolfe of Redlands: "The following may be of interest to The Pacific Telephone and Telegraph Company as well as to those operating the transcontinental lines. On Monday, September 11, one of my very dear friends passed away, and, as natural, I called at his house offering my condolences and help. I was informed by his widow (who is rather an old lady) that her daughter had left Akron, Ohio, for Redlands, hoping to arrive in time to see her father before he died. It had been planned that in case of my friend's death his body would be taken to Akron, and, as he died on Monday, his body was to be shipped at noon the following Wednesday. His daughter had left Akron and was in Chicago planning to leave for California on Monday night at 8:00 o'clock. This would bring her in California, as you know, Thursday, or one day after her father's body had left for the East. There had been many telegrams sent to Chicago trying to locate the daughter, and up to 3 o'clock p. m. there had been no reply. At this time I was appealed to, to see what could be done by telephone. I immediately put in a call for B. E. Thompson, chief operator of the Chicago police department, whom I have known for a great many years. At 4 o'clock I had Mr. Thompson on the line and asked him if he would use the police department to locate the daughter of my friend, breaking the news of her father's death as gently as possible, and have her return to her home in Akron. I quote you from Mr. Thompson's letter: 'Within fifteen minutes after receipt of your telephone message we had located the daughter as she was entering the depot to board the 8 o'clock California train. The news of the death of her father grieved her greatly, and after excitement of same was overcome our plain clothes officers and the station passenger agent obtained a return of the money paid for her ticket to California. The successful outcome afforded me considerable pleasure in that I was

able to serve you at such long reach.' Added to this, I saw a telegram from the daughter to her mother, in which she spoke of the gentleness of the police officer and his kindness in getting her money back for her and accompanying her to a hotel in a taxi. Upon her arrival at the hotel, the depot officials, as well as the conductor of the California train, forwarded to her the telegrams received by them, which she stated were most cold in comparison to the personal and kindly treatment she had received from the police department. The service rendered by The Pacific Telephone and Telegraph Company was most excellent and the treatment I received at their hands was most courteous. To be frank, I was rather excited. I had taken on the worries of the wife of my dead friend, and had assured her that the responsibility rested solely with me and the telephone companies, and I take this opportunity of thanking The Pacific Telephone and Telegraph Company and the other companies cooperating with them for the excellent service and courteous treatment received by me at the time when minutes meant everything. I can not be speak too greatly my gratitude for your help in this emergency. Yours truly, Carl D. Rolfe." To this letter Mr. Powley replied as follows: "My dear Mr. Rolfe: It was a pleasure indeed to receive your kind letter of October 14 regarding the Chicago telephone call. Our entire organization joins me in expressing our appreciation to you. I have forwarded your letter to our people so that all concerned may be apprised of the efficient handling of the call and your kind recognition of the organization efforts. Assuring you of our continued efforts to be of service, I am yours truly, N. R. Powley, Division Commercial Superintendent."

My Uncle Jim

"When bed-time comes, I say my prayers, 'N' then—before I go upstairs—
W'y Uncle Jim, he says 'Look out!
You better run; they's bears about!'

"Out in th' hall he goes, 'n' then
Th' big bear comes out of his den!

'Woof! woof!' he says, 'n' 'Woof! woof!' says he,
'I wonder where that boy can be?'

"'N' I'm right under th' big chair,
'N' he don't know! 'N' I don't care,
When he growls at Ma, as though he'd say:
'Have you seen a little boy 'round this way?'

"'N' he sniffs around among the chairs, 'N' under th' sofa—everywheres! In th' bookcase; on th' pantry-shelf, 'N' I just sit 'n' hug myself!

"'N' then I laugh out loud, 'n' he, Turns right around 'n' starts for me! A-growlin' away down deep inside, 'N' a-shakin' his head from side t' side.

"'N' I don't wait! I scoot for Ma, Th' scaredest boy that ever you saw! 'N' 'that'll do!' Ma says t' him, 'N' that bear's only my Uncle Jim!"

-Life.

RAY—Let's kiss and make up.

MAY—Well, if you are careful I won't have to.

"Topics of the Day" Films.





Payment of Sickness and Accident Disability Benefits Under the Benefit Plan and Supervision of Employees Receiving Such Benefits

The maximum periods of sickness and accident benefits, mentioned in the synopsis referred to in the schedules below, are payable only in cases where the employees are physically unable to work during the entire period absent; that is, under the provisions of the Benefit Plan sickness and accident benefits are payable only during actual physical disability, based on competent medical evidence, and it is not permissible to continue benefits during periods of rest or vacation after disability ceases.

The Benefit Fund Committee depends upon those directly in charge for supervision of employees who are receiving accident or sickness disability benefits. From reports received, the committee must determine whether or not an employee is entitled to have benefits continued, and whether or not a disabled employee is under proper care and receiving sufficient medical treatment. It is essential that the medical certificates furnished by the attending physician should give a complete history of the employee's condition, and that the weekly reports required under the routine should be made personally by the employee when condition permits, and complete in every detail. The information contained in these reports, and the report made by the supervising employee is used as a basis for determining the period during which accident or sickness disability benefits should be paid.

Synopsis of Benefits Payable to Employees Under This Company's Benefit Plan.

SICKNESS DISABILITY BENEFITS.

Benefits in Case of Disability. 9 weeks' half pay 13 weeks' half pay 39 weeks' half pay

ACCIDENT DISABILITY BENEFITS.

Total Disability-13 weeks' full pay; half pay for remainder of disability. Maximum benefits to be \$20 a week after six years of benefit payments.

Partial Disability-For first 13 weeks, 100% of loss in earning capacity; for remainder of disability, 50% of loss in earning capacity. Period of payments not to exceed six years

DEATH BENEFITS DUE TO SICKNESS.

Death Benefit Payable to Wife or Other Dependent Relative (Not to Exceed \$2000). Term of Continuous Employment.

Death benefits are payable to a wife or other dependent beneficiary, designated by the employee, in accordance with the provisions of the Benefit Plan. Employees who desire to change the names of their beneficiaries, previously entered on their Record of Service cards on file, should notify the Employees' Benefit Fund Committee, 210 Post Street, San Francisco.

PENSIONS.

One per cent of annual salary for each year of service, based on average annual pay for ten years.

Age.	Term of Continuous Employment.
60 years male, 55 years female	years or more of the president or vice

EMPLOYEES' BENEFIT FUND COMMITTEE.

B. C. CARROLL, Chairman

J. H. CORCOBAN D. P. FULLERTON F. C. PHELPS H. Matthiesen, Assistant Secretary T. V. Halsey, Secretary

210 Post Street, San Francisco.





22 · NOVEMBER · ELEVENTH MONTH



ON NOVEMBER 2, 1777, John Paul Jones sailed from Portsmouth, N. H., aboard the Ranger, the first vessel to fly the Stars and Stripes, carrying to Franklin, as lead of the American commission in Paris, a copy of the report of Burgoyne's surrender at Saratoga.

lead of the American commission in Paris, a copy of the report of Burgoyne's surrender at Saratoga.

Franklin had long been endeavoring to enlist French support for the American cause. The news of the Saratoga victory caused a favorable change of sentiment and the Treaty of Amnesty, pledging French cooperation, was the result. To guard against delay through the possible capture of the Ranger, a duplicate copy of the message to Franklin was carried to Paris by John Loring Austin, sailing by packet.

MOON'S PHASES

NOVEMBER hath 30 days

"'Tis hard for an empty bag to stand upright"-Poor Richard



ADEQUATE PROTECTION

医乳质乳质乳质乳质乳质乳质乳质乳质乳质乳质乳质乳质乳质乳质乳质乳质乳质

ADEQUATE PROTECTION
Storms, particularly sleet storms, annually cause heavy damage to the outside plant of the Bell System. Fires, floods, and earthquake shocks may destroy or damage not notly the outside plant but the central office equipment. No disaster, however, has ever been so widespread as to involve the whole country and the Bell organization is equipped to render quick and effective aid when one of, the Associated Companies is forced suddenly to meet such emergencies.

forced suddenly to meet such emergencies. In the case of the Bell System Companies, provision is made for losses of this character by depreci-ation reserves which afford adequate insurance protection.

TELEPHONE STOCK OWNERSHIP

The American Telephone and Telegraph Company which, together with its Associated Companies, comprises what is companies, comprises what is companies, comprises what is commonly known as the Bell System, had over 186,000 stockholders, including over 25,000 employee stockholders, at the end of the year 1921. More than half of the Company's stockholders are women.

Over 63,000 stockholders are women.
Over 63,000 own twenty-five momen.
Over 63,000 own twenty-five shares or less each, and more than 176,000 own less than one hundred shares each. Under the latest Employees Stock Purchase Plan, effective May 1, 1921, more than 100,000 Bell System employees have subscribed for an average of nearly four shares each. Nearly 60% of those eligible to subscribe under this plan have done so. American Telephone

The Bell System is a growing concern with a constantly growing business and an increasing number of stockholders and any thrifty man or woman may become a partner.

1-W -All Gaints Bay. First Telephone Exchange in Arkansas, at Little Rock, 1879.

2-Th.-North Dakota and South Dakota admitted to the Union, 1889. Warren G. Harding, 29th President, born at Corsica, Ohio, 1865. Cleveland Press, first issue, 1878.

3—Fr. —William Cullen Bryant, poet and editor, born, 1794.

4-Sa.—George Peabody, philanthropist, died, 1869, aged 74.
5-Su.—More than 450,000 tons of cable sheath are used in Bell System.
6-M.—The majority of Am Tel. & Tel. stockholders are women.
7-Tu.—Election Day. Battle of Tippecanoe, defeating Indian confederacy under Tecumseh, 1811.

Francis Parkman, -W -Montana admitted to the Union, 1889. historian, died at Boston, Massachusetts, 1893, aged 70. Louisville Courier-Journal, first issue, 1868.

9-Th.-Boston Post, first issue, 1831

10-Fr. -Illinois State Journal, first issue, under name

of Sangamon Journal, 1831 11—Sa. —ARMISTICE DAY. Washington (State) admitted to the Union, 1889. Exercises at funeral of America's Unknown Soldier heard by 150,000 at Arlington,

Va., New York and San Francisco, by means of Bell "Loud Speaker" apparatus and long distance lines, 1921. 12-Su. -Opening of Conference for Limitation of Armaments, 1921

13-M. -Edwin Booth, actor, born, 1833 (died, 1893).

14-Tu.-Robert Fulton, inventor of the steamboat, born, 1765

15-W. -First Telephone Exchange in Alabama, at Mobile, 1879.

16-Th.-Oklahoma admitted to the Union, 1907 New York Evening Post, first number published, 1801.

17-Fr. -Congress met for first time at Washington, D C., 1800.

18-Sa. -Chester Alan Arthur, 21st President, died, 1886, aged 56.

19-Su. -Lincoln delivered his Gettysburg Address, 1863. Garfield, 20th President, born, 1831 (died, 1881)

20-M. - Arkansas Gazette (Little Rock), first issue, 1819 Tribune, of Cheyenne, first issue, 1869.

21-Tu.-North Carolina ratified the U. S. Constitution, 1789.

22-W. -408th Telegraph Battalion (Northwestern Bell Tel. Co.)

sailed for France, 1917.
23—Th.—Franklin Pierce, 14th President, born at Hillsborough,
New Hampshire, 1804 (died, 1869).
24—Fr.—Battle of Lookout Mountain, 1863.

25-Sa. - Christian Science Monitor, first issue, 1908

26-Su. -First long distance telephone conversation, Boston to Salem, Mass., 1876.

4. T & T Co. stockholders are in every state in the Union

-Tu.-Washington Irving, writer, died, 1859, aged 76.

29-W. -Louisa M Alcott, writer, born, 1832 (died, 1888).

-Th.—6t, Andrew's Buy and Thanksgiving Buy. Samuel L. Clemens (Mark Twain), humorist, born, 1835 (died, 1910).

STATEMENT OF DEVELOPMENT OCTOBER 1, 1922

Showing the Increase and Per Cent of Increase in Owned Stations in Exchanges of 300 or More Stations Since January 1, 1922

			2	tations	indary 1, 1011					
	EXCHANGE—	Subscribers' Stations Jan. 1, 1922	Subscribers' Stations Oct. 1, 1922	Actual gain in Stations since Jan. 1, 1922	Per cent gain since Jan. 1, 1922	EXCHANGE—	Subscribers' Stations Jan. 1, 1922	Subscribers' Stations Oct. 1, 1922	Actual gain in Stations since Jan. 1, 1922	since Jan. 1, 1922
月月りしていた	GROUP No. 1— Los Angeles	(20,0) $62,122$ 1 $46,268$ $65,172$ $19,698$ $62,255$ 1 $76,912$	00 statio	ons and 16,569 2,869 2,612 818 6,974 2,217 489 482	over) 10.22 6.20 4.01 4.15 4.30 2.88 1.59 2.38	GROUP No. 6— Ashland	(500 778 608 703 589 690 763 627 538	stations 772 627 813 716 651 757 647 526	19 110 127 -39 - -6 - 20 -12 -	90 3.13 15.65 21.56 -5.65 79 3.19 -2.23
	Total5	(10,000) $(15,186)$ $(13,619)$ $(17,616)$ $(12,090)$ $(10,199)$		33,030	5.66	Dinuba El Centro Escondido Grants Pass Grass Valley, Cal. Hayward Hollister Inglewood Madera	517 958 493 730 625 702 635 666 699	588 986 518 747 655 783 660 805 742 796	71 28 25 17 30 81 25 139 43	13.73 2.92 5.07 2.33 4.80 11.54 3.94 20.87 6.15 4.33
	GROUP No. 3— Alameda Bellingham Yakima	(5,000) $5,518$ $5,125$ $5,503$ $16,146$	$\begin{array}{c} \text{stations} \\ 5,774 \\ 5,284 \\ 5,882 \\ \hline 16,940 \end{array}$	up to 256 159 379 794	$ \begin{array}{r} 4.64 \\ 3.10 \\ \underline{6.89} \\ 4.92 \end{array} $	Martinez Mill Valley Oroville, Cal Pasco Raymond Redding Sorte Clare	930 693 831 695	756 848 979 701 868 754 781	85 49 8 37 59	11.14 5.27 1.16 4.45 8.49 1.69
N. K. Charles and Control of the Con	GROUP No. 4— Aberdeen Alhambra Bakersfield Eugene Eureka, Cal.	(2,50 3,090 2,292 4,656 2,692 3,266	0 station 3,316 2,651 4,880 2,719 3,436	226 359 224 27 170	$ \begin{array}{c} 5,000 \\ 7.31 \\ 15.66 \\ 4.81 \\ 1.00 \\ 5.21 \\ 10.35 \end{array} $	Santa Clara San Leandro Sausalito Selma So. San Francisco Sparks Ukiah	754 607 650 594 573 596	874 650 678 635 591 608	120 43 28 41 18 12	1.59 7.08 4.31 6.90 3.14 2.01 16.02
	Glendale †Lewiston, Ida. Modesto Palo Alto Reno Richmond Riverside Salem	4,440	4,042 2,518 2,683 3,037 4,126 2,652 4,560 3,507	379 143 87 198 24 192 120 115	6.02 3.35 6.97 .59 7.81 2.70 3.39	Wilmington Total GROUP No. 7— Antioch Arcata Avalon Auburn, Wash	(3 . 324 . 468 . 385	$ \begin{array}{r} $	75 1,293 ons up to -7 -13 26 36	6.16 500) -2.16 -2.78 6.75 8.26
	San Mateo San Pedro Santa Ana Santa Cruz Walla Walla Total GROUP No. 5—	3,251 2,304 3,060 2,687 4,034	$3,564$ $2,544$ $3,439$ $2,898$ $4,163$ $\overline{60,735}$ 0 station	313 240 379 211 129 3,536	$ \begin{array}{r} 9.63 \\ 10.42 \\ 12.39 \\ 7.85 \\ 3.20 \\ \hline 6.18 \\ 0 2,500) \end{array} $	Benicia Brawley Calexico Carson City Chula Vista Cottage Grove Colville	. 305 . 409 . 437 . 452 . 291 . 303 . 330	324 434 489 456 322 305 334	19 25 52 4 31 2	6.23 6.11 11.90 .88 10.65 .66 1.21 7.24
	Albany Anaheim Astoria Baker Bremerton Centralia Chehalis	1,363 1,406 2,350 1,421 1,491 1,361	1,328 1,653 2,334 1,416 1,387 1,429 1,112	$ \begin{array}{r} -35 \\ 247 \\ -16 \\ -5 \\ -104 \\ 68 \\ 31 \end{array} $	$ \begin{array}{r} -2.57 \\ 17.57 \\ -68 \\ 35 \\ -6.97 \\ 5.00 \\ 2.87 \\ \end{array} $	Crockett Culver City Dunsmuir Fillmore Fort Bragg Kent, Wash. La Jolla Livermore	. 387 . 84 . 281 . 484 . 424 . 431	415 387 310 493 440 444 460 337	28 303 29 9 16 13 29 21	360.71 10.32 1.86 3.77 3.02 6.73 6.65
	Chico Coronado Corvallis Fullerton Hanford Hoquiam Klamath Falls.	. 1,975 . 1,353 . 1,835 . 1,030 . 1,421 . 1,568 . 1,278 . 1,232	1,387 1,831 1,177 1,450 1,706 1,229 1,288	13 34 -4 147 29 138 -49	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Milton Mountain View National City Nevada City Oakdale Placerville Pittsburg Paso Robles	. 278 . 365 . 366 . 335 . 299 . 348	308 410 376 333 312 390 430	$ \begin{array}{r} 30 \\ 45 \\ 10 \\ -2 \\ 13 \\ 42 \\ 3 \\ 74 \end{array} $	10.79 12.33 2.74 — .60 4.35 12.07 .70 19.22
	Marysville, Cal. Merced Monterey Napa Olympia Orange Oregon City Pendleton Petaluma Porterville	1,078 1,078 2,064 1,687 2,238 1,215 1,277 1,848 1,680	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	11	$egin{array}{lll} 7.70 \\ 8 & 5.72 \\ 3 & 1.96 \\ 5 & 3.80 \\ 9 & 6.50 \\ 7 & .55 \\ 9 & -1.57 \\ 0 & 6.55 \\ 2 & 7.45 \\ \end{array}$	Placentia Pomeroy Renton Ritzville Sebastopol Sonora South Bend Suisun St. Helena	343 461 311 384 292 366 389 288	470 319 378 313 375 426 3 306 3 344 368	18 6 7	-3.50 1.95 2.57 -1.56 7.19 2.46 9.54 6.25 1.78 1.94
	Redwood City Roseburg Salinas San Anselmo San Luis Obispo San Rafael Santa Rosa	$\begin{array}{c} 1,099 \\ 1,250 \\ 939 \\ 1,650 \\ 1,580 \\ 2,200 \end{array}$	$egin{array}{lll} 9 & 1,090 \\ 6 & 1,272 \\ 9 & 1,063 \\ 1 & 1,772 \\ 7 & 1,666 \\ 3 & 2,365 \end{array}$	$\begin{array}{c} -1\\ 12\\ 12\\ 12\\ 7\\ 16 \end{array}$	$egin{array}{lll} 9 &82 \\ 6 & 1.27 \\ 4 & 13.21 \\ 1 & 7.33 \\ 9 & 4.98 \\ 2 & 7.35 \end{array}$	Van Nuys Winnemucca Yreka Total	385 418 325 14,442 SUMM .583,48	3 406 5 330 2 15,411 ARY 7 616,517	$ \begin{array}{c} $	$\begin{array}{r} 9.61 \\ -2.87 \\ 1.33 \\ \hline 6.71 \end{array}$ 5.66
	The Dalles Vallejo Vancouver Ventura Visalia Watsonville Woodland Total	1,38 2,52 1,76 1,09 1,58 1,45 1,14	$egin{array}{ccccc} 1 & 2,463 \\ 4 & 1,761 \\ 4 & 1,196 \\ 5 & 1,613 \\ 0 & 1,543 \\ 7 & 1,173 \\ \end{array}$	3 —5 1 — 9 9 5 3 5 9 2 2	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Group No. 2 Group No. 3 Group No. 4 Group No. 5 Group No. 6 Group No. 6 Group No. 7 Total	$\begin{array}{c} & 68,71 \\ & 16,14 \\ & 57,19 \\ & 58,62 \\ & 21,00 \\ & 14,44 \\ & 819,61 \end{array}$	$\begin{array}{cccc} & 72,286 \\ 6 & 16,940 \\ 9 & 60,735 \\ 2 & 60,537 \\ 6 & 22,299 \\ 2 & 15,411 \\ \hline 2 & 864,719 \\ \end{array}$	794 $3,536$ $7,915$ $1,293$ $1,293$ $1,293$ $1,293$ $1,293$ $1,293$ $1,293$ $1,293$ $1,293$	5.20 4.92 6.18 3.27 6.16 6.71 5.50
	Total owned static	ne Ian	nary 1 1	922 1922	842,00 889,12	Actual gain in sta Per cent gain in s	ations si stations s	nce Jan. since Jar	1, 1922. 1, 1, 1922	. 47,119 . 5.60

